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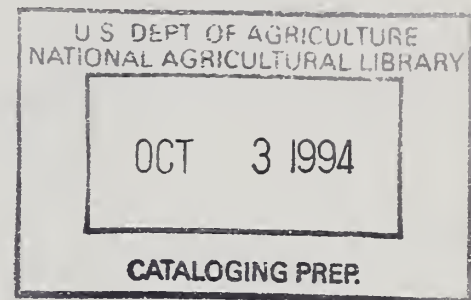
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HOME ECONOMICS/NUTRITION
EVALUATION REPORT



Extension Service
U.S. Department of Agriculture
Washington, D.C.

October 1980

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I.

BACKGROUND AND HISTORICAL ANALYSIS OF THE HOME ECONOMICS EXTENSION PROGRAM

THE MANDATE

. . . in order to aid in diffusing among the people of the United States useful and practical information on subjects relating to . . . home economics, and to encourage practical application of the same
(Smith-Lever Act, 1914)

The words of the Smith-Lever Act officially instituting Extension home economics work were agreed to by Congress following several years of discussion and still more years of successful work in the field.

The first report of outreach in the field of home economics was from Iowa Agricultural College in 1880 when a model kitchen was demonstrated at the Iowa State Fair.

Within the following decade, teaching of the local citizenry was launched by the College home economics faculty. In the years leading to the passage of the Smith-Lever Act, States throughout the South and Midwest offered education in topics ranging from the building of a "fireless cooker" to home sanitation, canning, sewing, home beautification, and installing "simple water works."

The mandate, set by Congress, offered no explication of method or content. Interpretation of intent is based more specifically upon the House and Senate debates that preceded enactment and upon the field experience. In both, it was evident that the informal educational processes and all matters relating to home and family were intended and most appropriate if "practical application" was the goal.

In this review of the program, involvement of persons in helping to plan and carry out their own learning experiences in the full range of home economics topics has typified the implementation of the mandate.

HOME ECONOMICS DEFINED AND DESCRIBED

The primary focus of home economics is family, the basic social institution responsible for the socialization of young children and the management of adult personality tensions. Family is the locus of the most basic economic production and consumption activities and serves important political, religious, educational, medical, and social welfare functions.

The thoughts of Seaman A. Knapp, father of Extension, and Ellen H. Richards, principal developer of the field of Home Economics, run parallel. Knapp said:

. . . the great force that readjusts the world originates in the home;

The home eventually controls the viewpoint of a man . . . unless you reach in and get hold of that home you are nullifying the uplift of the school; and

The matter of paramount importance in the world is the readjustment of the home. It is the greatest problem with which we have to deal, because it is the most delicate and most difficult of all problems.

Richards wrote:

The family is the heart of the country's life Whatever, then, will enlighten the mind and lighten the burden of every housekeeper will be a boom . . . The establishment of more homes and their right conduct when established, which results in the better utilization of time, money, and strength, means the perpetuity, prosperity, and power of the nation.

More recently, the profession of home economics has been described as follows:

The focus of home economics is family in its various forms. Family is defined as a unit of intimate, transacting, and interdependent persons who share some values and goals, have responsibility for decisions and resources and have commitment to one another over time.

Home economics views the family as a major source of nurturance, protection, and renewal for the individual. As an educational force, the family significantly contributes to the qualitative formation of its individual members and has the potential to prepare them for effective productivity for self and society.

From this perspective, home economics works through family to effect an optimum balance between people and their environments. Home economics accepts the challenge of helping people to adjust to change and to shape the future.

The core of home economics is the family eco-system: the study of the reciprocal relations of family to its natural and manmade environments, the effect of these singly or in unison as they shape the

internal functioning of families, and the inter-plays between the family and other social institutions and the physical environment.

(New Directions II. Statement of Philosophy of the Home Economics Profession; American Home Economics Association, 1975)

This statement is built upon a definition by Richards expressed in 1902:

Home economics in its most comprehensive sense is the study of the laws, conditions, principles, and ideals which are concerned on the one hand with man's physical environment and, on the other hand, with his nature as a social being, and is the study especially of the relation between these two factors.

As guidelines for professional home economists, these set, in part, the frame of reference for home economics activities within the Extension program. The inclusion of the concept of practicality, mandated in the original enabling legislation of Extension, shapes the dimensions of education for families through Extension. Early proposals to end debate within Congress, enact the Smith-Lever Bill, and set appropriations thereafter give evidence of an underlying appreciation of the family as the primary social institution responsible for nurturance of life, transmission of values, restoration of the individual, provision of basic necessities, development of work habits, formation of appropriate attitudes towards governance and education. With these functions in mind, the validity and also the necessity of educational activities focused on obtaining and maintaining optimum food, clothing, and shelter; parenting education and family relations including the elderly; cultural arts and leisure activities; individual health and home management; family economics and consumer behavior; and community involvement becomes apparent. It is the composite of these activities that constitute American family life.

The professional and home economics Extension leadership interprets family in the broadest sense, not in terms of structure, but rather in terms of function. This provides for effective address of problems of all families whether they be families of orientation; families of procreation; or the modern phenomena--families composed of persons unrelated by blood or law for the purpose of mutual support and endeavor; and individuals living alone.

What makes it so critical for families to succeed in their function? It is the fact that the functions of family are basic to all effective individual or group performance in the other social institutions --the economy, policy, education, and religion. When the family fails, three things become manifest. First, another social institution will attempt to compensate for the failure. Secondly, the compensatory action will be far more costly than proper original action on the part of family. Thirdly, the compensatory action will have a lower rate of achievement than a fully functioning family. Hence, the whole economy of the nation is significantly jeopardized when families are not capable of performing their tasks.

THE MISSION

The home economics Extension program is carried out within the context of both the Smith-Lever mandate and the professional orientation. It is based on three major assumptions:

1. There is a mutuality of purpose between family and other social institutions.
2. The quality of the larger society is significantly dependent upon the quality of life within families.
3. Appropriate practice change in a critical mass of families makes a positive impact upon the society.

The mission, therefore, is to teach family members the attitudes, knowledge, skills, and aspirations necessary for them

1. to satisfy basic food, clothing, shelter, and health care needs,
2. to constructively interact within the family and with those individuals and groups with which the family must engage, and
3. to provide a milieu in which individuals are accepted on the basis of ascription and through which culture can be transmitted or modified to better serve both the individual and the larger society.

A brief review of program history will show how that mission has been carried out and how the program is both cause and effect of social and economic conditions.

AN HISTORICAL REVIEW - 1900-1920's

In the early years, almost all resources were directed to combat rural poverty. It was not so much that poverty existed only in rural areas nor that it was necessarily more severe. Poor living conditions and poor health abounded throughout the nation.

Scientific knowledge had reached a state of maturity necessary to address these problems. There was a strong political commitment to demonstrate the capacity of a young nation to assure a high quality of life for all of its citizens and to secure for the nation a respected place among nations.

A number of welfare movements had been initiated in the urban areas. The dispersion of people and the limited nature of communications and transportation in rural areas precluded their transference to the countryside. Farm families did not wish to be left behind. Educational and political

leaders saw the danger which lay ahead --economic and social polarization of people on the basis of their place of residence. The well-being of all was contingent upon equal opportunity to flourish.

While industrialization was advancing at a rapid rate, it was apparent that its durability was dependent upon a vigorous farm sector to produce both the food and fiber necessary to sustain the labor force and labor, itself, to sustain industry. It was out of this milieu that Extension and the Extension home economics program were born.

In the years immediately preceding and following the passage of the Smith-Lever Act, home demonstration agents gave special attention to teaching families the skills necessary to assure a good diet for the farm family and reduce the excessive burden of labor that fell upon the female members. When the nation entered into World War I, a new program interest arose from the emergency situation. Homemakers were instructed in the techniques of design and construction of garments. Children, those remaining at home to till the soil, and returning soldiers benefitted from these production skills. The continuing goals of home food production netted substantial results. In the South, in 1918 alone, more than \$18,000,000 worth of vegetables, fruits, meat, and fish were preserved by homemakers enrolled in the demonstration work.

The first report of city-based Extension home economists occurred at this time. Although not apparent at the time, there would always be pressure to make this educational service available to all families irrespective of their place of residence.

Educational efforts to achieve quality through standardization of processes and products had a two-fold effect. The safety of home-processed food was greatly increased and markets for home-produced food were opened. For example, in North Carolina, the processing and preservation of muscadine grapes into jelly, marmalade, paste, butter, and juice expanded the year-round food supply of families while providing products which were marketed to three railroad systems, thus supplementing the family incomes.

Later, this emphasis on standardization would be applied to clothing, housing space allowances, and household equipment. The movement would lead to commercial adoption of the standards to satisfy the demands of enlightened consumers.

In 1919, reports from 10,000 women identified major problems to be addressed by home economics Extension. These were subsequently reflected in programs which focused on introduction of improved home equipment and more efficient methods of home management; application of the laws of nutrition and hygiene in child care and feeding; family food selection, home nursing, and installation of sanitary improvements; and cultivating the idea to invest in comfort, health, and efficiency of farm, home, and community.

With the advent of electricity and telephone communications in rural areas, which occurred after World War I, home economists encouraged program participants to consider the advantages of light and labor-saving appliances to improve the range of options within the household. In some cases,

adoption of these new technologies made it possible for women to engage more broadly in the activities of their farm operation or the social and religious organizations in their communities. In others, the adoption freed women to pursue new educational or service roles.

Extension home economics personnel launched radically new approaches to the problem of assuring proper growth and development of children. In general, there was added emphasis on better health and better schools. Parents were made more aware of the essential nature of their participation in the local educational system. Capitalizing upon the public support for improvements, home demonstration agents assumed a broader role in community development. Throughout the nation, these home economists and Extension homemakers began to organize the first rural school lunch programs. In Ohio, for example, 400 schools in 20 counties established school lunch programs as a result of these combined efforts. Similar impact was achieved in many areas throughout the nation.

In some areas, home economics agents worked closely with families and community leaders toward the development of consolidated school districts. Particular attention was given to the need of high school students for expanded and equal opportunity to receive instruction in basic sciences.

During this initial period of the home economics program, primary emphasis was given to instruction that would result in immediate practice adoption. The kinds of changes necessary to relieve poverty and increase health were tangible and generally within the economic capacity of the program participants. Just how effective these efforts were would become evident in the seventies when medical epidemiologists would recognize the significant impact of improved nutrition and sanitation upon reduction of infant mortality and increased longevity. The impact could be measured only when the health of succeeding generations manifested results.

It was not too early, however, for Extension home economists to recognize the opportunity to instill ideas which would raise aspirations of cooperating families. Result demonstrations were followed by diffusion of information by benefitted homemakers so that millions of families were affected. These "volunteer" teachers carried a new spirit of inquiry to their neighbors. Homemakers began to realize that changes in their communities and in the market place were also needed and that they could influence the adoption of change in those spheres, as well as within their own families.

Program participants had little formal education and were easily persuaded by the "college people" to accept direction initially and, as recommended practices showed benefit, to share their new found knowledge with others. The immediate program beneficiaries began to be perceived by neighbors, relatives, and friends as leaders, not only in the management of their own homes, but also in the community at large.

Indeed, they were. Confidence generated by successes within the home environment raised aspirations and motivated homemakers to direct more of their energy toward those elements outside the home which impacted upon their families.

DEPRESSION YEARS THROUGH WORLD WAR II

Awareness of and experience with expanded options allowed women to play a more contributory role through the depression years. Along with substantive address of all the production skills necessary to survive the "hard times," hundreds of previous program beneficiaries were recruited to help carry the educational effort to the most remote areas of their respective counties and to the most oppressed families through small group meetings. This became the model on which the Home Demonstration Club was built and later institutionalized in the National Home Demonstration Council.¹ This formalization gave the first recorded evidence that not only Extension leadership, but also Extension beneficiaries fully intended that the work be done "with" rather than "for" people. The purpose set forth in the constitution of the Council was:

To further strengthen, develop, coordinate, and extend adult education in home economics through the Cooperative Extension Service of the USDA and the land-grant colleges. To provide opportunity for homemakers in home demonstration groups to pool their judgment and experiences for the progressive improvement of home and community life. To offer a means by which homemakers can initiate, interpret, and promote Extension projects of national importance in the protection of the American home.²

Renumerative employment also emerged as a possibility for the women who had participated in and benefitted from home economics Extension programs. Home Demonstration Club members were employed as garden directors, sewing and lunchroom supervisors, instructors, and demonstrators under the Rural Rehabilitation Program.

A classic example of the ingenuity of the staff is found in the reports of the mattress program. The destitution of families and a slump in the cotton market in a high-yield year were the background for a project in which cotton surpluses were turned into an average of 40,000 mattresses in each of the participating States. Responsive Federal assistance to purchase and make materials available and back-breaking labor transformed an economic emergency into a developmental situation. The cotton originally destined for W.P.A. manufacture and dole to needy families was released to home demonstration agents who then taught families in need to make their own mattresses. The surplus was handled in a manner which aided farmers, taught family members skills which could be used again to improve the quality of their homes, and immediately contributed to the ability of families to meet their basic needs. More than three million low-income families benefitted.

During this period of history, America was changing rapidly. The move of youth was to the cities. Those who remained in the countryside were determined to eradicate differences in lifestyle with their city relatives. Greater attention was given to the management of farm and home finances. More women, with the encouragement and educational assistance of the home demonstration agent, became centrally involved in these decisions since the

goal of larger acreage or higher yield was to achieve a more comfortable, convenient home, and a more satisfying and healthful existence.

Modernization of farmsteads ranked high in the educational priorities established jointly by the Extension home economist and the participant homemakers. The subsistence level of economy during the depression and the shortages attendant to wartime acted as deterrents to immediate action; however, the results of this "raising of aspirations" coupled with practical skill teaching came to fruition in the years immediately following World War II.

The misery of pervasive poverty was compounded by the great drought of the 1930's. The need to remove surplus meat and conserve grain led home economics Extension into a massive meat canning program. The coordination of the interests and actions of processing plant owners and operators with those of thousands of farm men and women coupled with instruction in butchering and processing, benefitted families, agriculture, and commerce in the afflicted areas.

The attack of Pearl Harbor and subsequent declaration of war transformed a struggling nation into one of determination to preserve and defend. Isolationist philosophies were set aside. During the fight for survival, American homes became the primary locus of psychological reinforcement. Women, by the thousands, took up jobs in agriculture, business, and industry. Traditional family member roles were permanently altered. The immediate need addressed by home economics Extension was to teach family members how to combine the activities of a full work day outside the home with those required for continuity of home life. Freezers had been introduced in 1941 and became a major means of preserving the abundance in Victory Gardens. Major goals were to prevent waste, increase work efficiency, maintain health necessary for service to the nation, and establish an understanding of the need for sharing. Scarcity, high prices, and inferior quality of goods spurred home economists to teach clothing and furniture renovation skills. Women who previously had been deterred by spouses from participation in financial management instruction were now encouraged to learn the same basic skills in order to manage ration stamps and thereby secure maximum value for the family allotment.

During this period, primary emphasis was on manual skills and only a minor portion of effect was directed toward consumer practices. The early attention to skills necessary to affect change in the community began to wane. The organizational efforts undertaken were directed to the formation of groups and leadership necessary to the foundation of Home Demonstration Clubs. While the membership growth which would accrue from this organizational work would provide some operational efficiency and a formal means by which to involve large numbers of persons in the program determination process, it would also serve to limit the access to home economics Extension by those who did not hold membership. As members increasingly rose in social and economic status, the home economics Extension program and personnel moved farther and farther away from their original association with the poor.

The introduction of information dissemination through newspapers and radio was a significant break away from the earlier process of working intensively

with potential early adopters of practice change, with the promise of their assistance to carry out the diffusion process. Few raised any question about the soundness of this shift in program methodology for the use came as a direct result of the urgency imposed by wartime conditions, e.g., greater demand for information rather than education, shortage of qualified staff, limited fuel for transportation to meetings and home visits.

There was great disequilibrium between the number of home economics positions and qualified professionals. The long working hours, low salaries, and isolated work centers that characterized Extension positions did not attract large numbers of capable and dedicated persons. Positions were often left vacant for long periods of time thus disrupting the continuity of programs. Still others were filled with inexperienced graduates with minimal professional training. This situation would prevail for at least two decades and would result in diminution of program impact.

POST WORLD WAR II THROUGH THE 1950's

The nation, having discovered its great potential for production, converted to peacetime manufacture. What had been impossible to purchase before was now available in a multitude of makes and models. Families had money to spend. Government was extending electrification programs and initiating improvements to highway transportation and water resources. The nation had committed itself to rebuilding war-ravaged nations.

Extension home economists moved from production skills to consumer education. The value of earlier teaching was manifested in major home improvements made by previous program participants. Records show that in Texas in the period from 1941 through 1955, nearly 100,000 living rooms, 148,360 bedrooms, 45,587 bathrooms, and more than 90,000 kitchens were improved by the addition of running water, installation of gas or electric ranges and refrigerators, and construction of suitable home storage facilities. This same phenomenon occurred in every State.

Additional States joined the National Extension Homemakers Club (NEHC) and the organization heightened its work in health education, urging and assisting in the initiation and expansion of school lunch programs, establishing international ties, and launching traffic safety forums. In the late 1950's, NEHC was cited by the National Foundation--March of Dimes and the American Cancer Society for its achievements in health education throughout the nation, and received grants from the National Safety Council and the Allstate Foundation for work in pedestrian and auto safety education. These areas of study and action, while outside the general area of expertise of home economists, were chosen as the direct result of home safety and family health education for which Extension personnel can be credited.

Continued food production and preservation were encouraged to free farm-produced commodities for international assistance programs. Attention was given to programs that were designed to increase understanding and application of dietary allowances in family meal planning by use of a wider variety of foods.

Programs were increasingly carried out through the club structure and information dissemination through electronic and print media. There was increasing demand for home economics to deliver "craft" programs to satisfy leisure time interests of program participants. Leadership in home economics Extension resisted this move, but found it expedient to compromise in the face of losing audience numbers.

At the end of the decade, the USDA, in cooperation with State directors and program leaders, issued the SCOPE report calling for greater attention to urban and young families. It emphasized the variant cultural and economic aspects of potential audience groups and recognized the need to form cooperative relationships with representatives of related fields of knowledge. It urged the greater involvement of learners to assure relevance between need and program. The idea of working through others who work with families (e.g., case workers, health service workers, secondary teachers, ministers) was introduced. More than any previous document of its type, the SCOPE report (1958) gave great importance to the development of cognitive and affective skills and less affirmation to manual skill development.

The population move to suburbia was not accompanied by any substantial reallocation of staff resources, however. The vast number of new housing starts and the formation of new families was not significantly addressed. There was a tendency to cling to the known support bases rather than to break into the unfamiliar urban political structures and subject matter areas in which staff was least adequately prepared.

THE 1960'S THROUGH THE 1970'S

Through this period, there was a great move to use of electronic and print media as a means of serving audiences of increasing size and diversity. State legislatures called for more service to urban and suburban families as had the SCOPE report. The population had migrated from rural areas to seek better employment opportunities. Families were experiencing increasing exposure to "hard-sell" merchandising and increasing stress from the national trend toward individual economic achievement. The permissiveness of early childhood education was generating concern and would later prove to result in young adults less capable of coping with stress. There appeared to be a severe breakdown of the family as a sustaining unit of society and few, if any, extolled the virtues of family life. The craving for excitement drew individuals into commercial outlets, travel, and leisure activities.

Most States launched intensified Extension home economics programs in child development and family relations. Parenting education efforts were co-sponsored with school districts, parent-teacher associations, and a wide variety of State and local, public, and private agencies. School lunch personnel were taught not only how to prepare Class A lunches, but also how to relate to children to foster adequate nutrition practices. Some States sought and found means to introduce new approaches to health education. All States gave intensive address to consumerism in response to the increased awareness of fraudulent practices and regulatory legislation. This represented a shift of emphasis from "what" to buy, to "how" to buy.

The outcomes of these more recent developments are more specifically documented in subsequent sections of this study. It is important to note here, however, that the effort to keep family needs in the consciousness of the population and those responsible for programs was rewarded by a new sense of value for and attention to family in the 1970's.

A period of affluence had generated a readiness on the part of those who were still outside the mainstream of society to press for increased opportunity. In several parts of the nation, Extension home economists began to experiment with an early Extension model--the employment of indigenous paraprofessionals to reach isolated populations. The early model addressed geographic isolation. In the 1960's, the barrier to break was social and economic isolation. The success of the effort required legitimization among long-standing clientele groups and university administrators responsible for the conduct of the program and resulted in proof that the model could be effective. By the end of the decade, Congress had seized upon this demonstration idea and provided appropriations for the conduct of the Expanded Food and Nutrition Education Program (EFNEP). In spite of static funding for most of the years since, this program remains active and effective long past the general demise of the War on Poverty and the dramatic program efforts associated with the Great Society. The program was not conducted in lieu of the other established educational efforts of Extension home economics, but in concert with them.

This was not the only evidence of concern for families in need. In 1966, FOCUS, a program planning base book, was published by Extension Committee on Organization and Policy (ECOP). Attention was given to the major forces impinging upon the effective conduct of family life--early marriage, poverty, mobility, and a perceived loss of individual identity, tension accruing from unbridled technological advances and transference of family functions to the community. These conditions were recognized as major contributors to changing values and roles of family members. The basic stability of the society was preceived to be threatened by the weakening of the family unit.

Recommendations called for programs which would contribute to a reawakening to the essential role of family and the kinds of conditions requisite for successful individual transition through life stages. Impact of the programs undertaken in this era would become evident in slightly more than a decade.

The beginning of the inflationary spiral was recognized and addressed in this document. Programs to increase understanding of the trends in consumer behavior, to encourage the responsible use of credit and consumer protection measures, and to assist families in their financial management decisions were given priority.

Proposals to assure families could and would obtain and maintain adequate housing called for increased attention to the role of local government and construction industry personnel. Those related to family health called for less reliance upon the medical delivery system and increased self-provider capacity.

Since there was increasing transference of family functions to the community, questions were raised about the inadequacy and quality of child care; youth and family counseling; senior citizen services; institutional and commercial food service systems; and health, welfare and sanitation facilities. Development of all resources of the community whether individual, social, cultural, or economic was a major theme.

Reliance upon Homemaker Clubs came under scrutiny. The groups lacked representativeness of the total population. The membership was older, more affluent, and except for clubs in the southern States, were predominately--almost exclusively--white. More emphasis was given to "special interest" meetings open to club and non-club members. Homemaker Clubs were expected to satisfy their educational needs through "project leaders"³ and through the activities associated with their own organizational units. Organizational and management consultation continued to be provided by Extension home economists, but the group looked to its own trained leadership more than ever before as they found the agent engrossed in other educational tasks. Since National Extension Homemakers Council and its State and local affiliates had become a separately incorporated organization, no longer under the immediate direction of Extension, its program of work was determined less by the offerings of the home economics program and more by the member demands.

This period was characterized by major programmatic shifts, reliance upon new modes of delivery, reduction of service to homemakers clubs, experimentation in seeking new audiences, conducting programs in urban and suburban areas, and developing relations with agencies created to serve the poor.

The contribution of input by non-Extension university faculty into program determination processes waned. Staff and administrators were divided in their commitment to traditional and new programming interests.

CURRENT CONDITIONS AND PROGRAM GOALS

The special institution, family, increasingly is seen as the primary means by which problems can be solved. Institutionalization of individuals who have special needs, whether they be in advanced years, physically or emotionally handicapped, or engaged in delinquent behavior is perceived to be generally less successful than proper home care. School officials are more frequently involving parents and other adults, significant to youth, to assist in the instruction and counsel of children. Churches are recognizing the role of family in the spiritual and social development of individuals, irrespective of age. Government assistance programs are under increasing criticism for tending to create generations of dependence rather than to ameliorate the causes of poverty, disease, and behavioral impropriety. In each of these moves, leaders point to the family as the most powerful force to overcome individual and group dysfunction, inequity, and discontent. Family members themselves appear to be recognizing the importance of their most immediate group relationship and increasingly are seeking means to achieve more satisfying and constructive family life.

Families, particularly among the lower and middle classes and elderly, are severely beset by uncontrolled inflation. Youth and the unskilled are confronted by limited employment opportunities. The abundance for which the nation is known throughout the world continues to elude nearly 12 percent of the population as determined by the official poverty line. A more realistic measure of limited resource--one-half the median income--shows that more than 17 million children in the United States are living in a state of economic deprivation. Social statistics demonstrate that these children are significantly more subject to conditions--placement in foster homes; nutritional deficiencies, dental caries; unsafe, delapidated, and deteriorated housing; poor school performance; and crime--which permanently damage the capacity to perform adult functions.

More than 40,000 children from all social classes are estimated to die each year from abusive treatment within the home. An increase in the incidence of spouse abuse is reported. While more couples are staying married longer than ever before in the nation's history, the divorce rate continues to be the object of concern for those who recognize the importance of family.

Increased longevity has created a large population of persons who do not have adequate life models for the later years. They find it increasingly difficult to maintain independent living arrangements and few satisfactory alternatives to meet their needs. Nearly 20 percent of the senior population have no children to assist in their care.

The escalating energy crisis is demanding that all citizens modify life styles as well as home structures to conserve limited natural resources and to reduce family financial strain. Inflated housing costs and interest rates and limited housing alternatives are jeopardizing the long-term financial security of young families who are just becoming established and the elderly who seek smaller homes or congregate living arrangements.

As leaders in family education, Extension directors and program leaders, working with the USDA, issued a new and more compelling program determination document, FOCUS II (1974). In contrast to earlier publications (SCOPE, 1958 and FOCUS, 1966), FOCUS II gives greater visibility to the role of Extension home economics as a major educational force in improving human nutrition, particularly among the poor, the young, and the elderly. Understanding nutritional requirements in relation to one's own situation, the formation of appropriate food habits and diet as the most suitable means of weight control, is given priority. Using nutritional labeling, conserving nutrients in preservation and preparation, and recognizing and understanding food additives and fortification are seen as means to aid in achieving nutritional programs to increase consumption of fruits, vegetables, and dairy products; to increase awareness of the dangers of excessive consumption of "junk" foods and reliance upon "fad" diets; and to recognize proper diet as a preventive health maintenance measure. The issuance of new standards, U. S. Recommended Daily Allowances by the FDA, is cited as both cause for program address and a basis on which to teach.

Consumer concerns continue to have visibility in FOCUS II, but greater emphasis is given to developing family competence to live with less dependence upon credit. Planning for retirement under inflationary conditions is viewed as a necessary program area to forestall the trend of persons falling into poverty in their later years.

Parenting education is encouraged as are marriage preparation programs as the incidence of divorce and separation continues to climb. Rather than heightening dependence upon community services to provide family functions, there is a call to influence both family members and community leaders to work toward interdependency.

Housing and health continue to have visibility. For the first time, there is documented attention to the need of handicapped and elderly persons to live in "barrier-free" structures. In the discussion of health program needs, venereal disease, drug abuse, mental/emotional illness, as well as teenage pregnancies are cited as areas requiring action.

This kind of a planning document has focused the attention of those who participate in the program determination process to more specific audiences and issues. Below is a brief outline of the major program thrusts identified in the current State plans of work evolved through the planning process.

Subject Matter Area	Major Program Thrust	Comment
Housing, Home Furnishings and Surroundings	<ol style="list-style-type: none"> 1. Energy Conservation. 2. Repair and maintenance of housing and furnishings. 3. Planning for purchase, building, and remodeling. 	<ol style="list-style-type: none"> a. In both old and new construction, attention is given to modified life styles as well as home structures. b. Programs are designed to address inflationary factors. c. Special attention is being given to adjustments necessary to live in smaller spaces.
Textiles and Clothing	<ol style="list-style-type: none"> 1. Remodeling and purchasing skills. 2. Adapting clothing for the elderly and handicapped. 3. Care practices. 	<ol style="list-style-type: none"> a. Production skills are taught to reduce inflationary impact on families and as a major alternative to limited marketplace solutions. b. Heavy emphasis upon food and water conservation.

Subject Matter Area	Major Program Thrust	Comment
Family Economics and Management	<ol style="list-style-type: none"> 1. Lifelong financial planning. 2. Family crisis management. 3. Protection of family income. 	<ol style="list-style-type: none"> a. Particular attention is given to insurance and retirement programs, preventing bankruptcy, planning major purchases, and managing capital assets.
Family Life and Child Development	<ol style="list-style-type: none"> 1. Interpersonal relations in marriage. 2. Parenting education. 3. Adjustments to aging. 	<ol style="list-style-type: none"> a. Attention is given to preparation for marriage as well as to sustaining viable relationships. b. Special emphasis on single parent families is evident. c. Recognition of adjustments among aging and the "next" generation responsibility is apparent.
Food and Nutrition	<ol style="list-style-type: none"> 1. Adjusting to food supply, inflation, and family resources. 2. Analysis of electronic and specialized food preparation equipment. 3. Formation of food and nutrition policy. 4. Special diet planning. 	<ol style="list-style-type: none"> a. Emphasis is on obtaining and maintaining nutritional adequacy. b. Safety, energy conservation, and utility are primary factors of concern. c. Policy programs are directed to community influentials. d. Particularly in areas where health and medical facilities are limited, emphasis is given to self-provider education.

Intensified program planning processes have resulted in some immediate impacts upon audience groups. Homemakers who have completed the basic instruction offered through the Expanded Food and Nutrition Education Program (EFNEP) are entering into broader and continuing education in structures such as, or similar to, the Extension Homemaker Club program. Men, as well as women, are becoming members of study clubs and participating in home economics programs. Members of club groups and those participants outside the club program are

witnessing greater cooperation between Extension home economists and representatives of other agencies and organizations. As a result, they are more effectively acceding appropriate services in the community. Participants in all Extension programs are demonstrating more involvement in local government and attention to national issues. For example, as Extension audiences gain more knowledge of the dangers of faulty mobile home installation, they are pursuing establishment of appropriate ordinances. Awareness of the nutritional status of Americans has brought some to more intensive study of causes and a greater interest in and support of a relevant national food and nutrition policy. The need for immunization of children and expanded developmental and health screening has been responded to by thousands of volunteer service hours contributed by Extension homemakers.

Home economics Extension is encouraging a coordinated approach to the family. In contrast to the independent specialization of programs which developed in the post-war years, it is attempting to provide multi-disciplinary instruction based on issues. For example, child care education includes such elements as home care practices, awareness of day care options, financial planning to assure education, early detection of disabilities and identification of medical and social services, adequate nutrition through food habit formation.

The ultimate impact of these approaches and involvements will become evident in the future. The immediate result is increased frequency with which Extension home economists are called upon to serve in a consultative or advisory role to other agencies and to community groups.

ISSUES RELATED TO CURRENT CONDITIONS AND PROGRAM GOALS

Scope. While the aims of the planned programs are consistent with the mandate and mission of Extension home economics and the knowledge within the home economics profession, it is unlikely that the program can have highly visible impact immediately. The issues to be addressed through program are ones which bear upon almost all families of the nation. Less than 4,000 staff-years of professional service in the Extension home economics program can only benefit a small portion of the nearly 70,000,000 families of America. The limited nature of resources available suggests the further narrowing of potential audience groups is appropriate, yet greater specificity tends to weaken the bid for State and local funds in support of program. Audiences previously served tend to exert increased demand for continued benefit.

Narrowing the scope of subject matter tends to weaken the capacity of the program to adequately address the complexity of family-related problems. This is particularly critical in areas of the nation in which there are limited alternatives for educationally-oriented programs and among audience groups such as the poor who have few resources available to meet their needs.

Cooperation. The quality and quantity of cooperative relationships with private and public agencies with related interests have expanded and are increasingly handled through formal agreements. Such relationships, however, do not necessarily prove to be efficient in reducing time expended or in heightening the visibility of Extension impact. While relationships of this type are essential to increasing the quality of service to families, they demand regular and frequent interaction between agency personnel and, more often than not, result in the identification of new, unmet needs.

Program Method. Except for a portion of the Expanded Food and Nutrition Education Program (EFNEP) operation, most program effort is made through group meetings taught by professionals or trained volunteers and through electronic and print media. The result is some reduced control over content quality, feasibility of sensitive evaluation, and depth and intensity of program experience.

At the same time that less attention is being given to groups of homemakers organized under the aegis of the Extension Homemaker Program, the EFNEP guidelines encourage the formation of group learning situations in lieu of one-to-one teaching. In States where the Homemaker Club program is active, these units are encouraged to assist and support the emerging EFNEP groups. The differential Extension support to these two groups creates a degree of tension that is not contributory to the aims of either program.

While group formation can lead to more efficient program delivery, it is important to realize that successful formation can be effected only as the result of shared positive experience and support sustained long enough for natural group leadership to emerge. Where geographic or social isolation are factors, as they are among the EFNEP clientele, external organizational support is critical.

Coordination. While there is great similarity of programs to be undertaken in the States, there is still little effective coordination of program materials to be developed and used. There is no current mechanism by which any State can be fully aware of the plans of work in other States. Major training efforts remain a function of the individual States. In recent years, some educational materials have been developed at the Federal level for use in all States. Differing distribution policies and programming methods have precluded universal acceptance or use of the materials in their original form.

Within the last two years, there has been increased effort to inventory materials on a regional basis. This has been fairly effective in the northeast region for more than a decade. The recent effort has moved the northcentral region forward in this endeavor to capitalize on the total resource base within an area where conditions are most similar. Several factors have deterred progress. Desire to maintain credit lines for the respective States and universities, a tendency to foster dependence of field staff upon their own university departmental faculties, and a dissimilarity of conditions and/or recommended practices from State to State are the foremost deterrents.

PROGRAM DETERMINATION

The Extension segment of the land-grant system is a formal bureaucratic organization in each State which has for its goal the activation of its recipients to achieve goals deemed desirable by both the recipients and the public bodies who organized and financed the sponsoring development organization. It represents a merger between local, State, and national goals by legitimately activating the people to want to produce the goods and services deemed desirable by the nation and the States. (Christopher Sower)

As such, the Extension program is formulated in a way unique among governmental agencies. Even with the current national emphasis upon citizen advisory groups, the particular manner of public involvement in Extension is significantly different, has its own set of advantages and disadvantages, and brings about distinct results. Home economics shares a basic model of program planning with other Extension programs, but differs from them in the scope and intensity of action and the variety and types of persons generally sought to participate.

Four major elements are part of the home economics program determination process:

1. Awareness of the individual and family goals of the population to be served and those who serve.
2. Identification of the social and economic conditions impacting on families.
3. Familiarity with the science and technology available.
4. Understanding of the executive and legislative imperatives as they are expressed through policy formulation, regulation, and appropriations.

Each of these elements is comprised of innumerable and changing factors which may influence the specific content and method of program planned, implemented, and evaluated. Over time, the components have had varied degrees of influence and balance in program determination. The interests and capabilities of staff always play a significant role, but tend to be unexpressed in documentation. The impact of earmarked funds through appropriations, grants, and contracts is more easily accounted for. Any statement of social and economic conditions on a Statewide or national basis is subject to adjustment to represent local conditions.

It is immediately evident that no single person nor participant group in the Extension organization is the primary expert in all of these elements. No one element stands as the single best entry point for program determination. As a consequence, there is a great dispersion of persons engaged and a wide variety of processes employed to arrive at the specific programs to be

delivered. The outcome is a program that varies as substantially as does the nation of people to be served. The unifying force is the focus on family.

FEDERAL INPUTS

Federal Extension administrators and staff are expected to provide clear interpretation of congressional and cabinet level decisions and commitment to the education of families, the ramifications of regulatory legislation, assessment of national trends, and familiarity with activities of other governmental agencies and national organizations which have bearing on the ability of families to perform their primary functions. On occasion, action by USDA to formulate memoranda of agreement goes beyond this informational role, but historically it has been left to the individual States to independently enter into working relationships unless there has been a binding financial exchange at the national level.

As described in the historical review, periodic assessment of social and economic conditions and program implications is undertaken and made available to all States to be used as determined by the respective States. Although such documents are undertaken at the direction of Extension Committee on Organization and Policy (ECOP), Federal Extension plays a significant role in providing coordination and staff assistance to the ad hoc task force assigned to the endeavor.

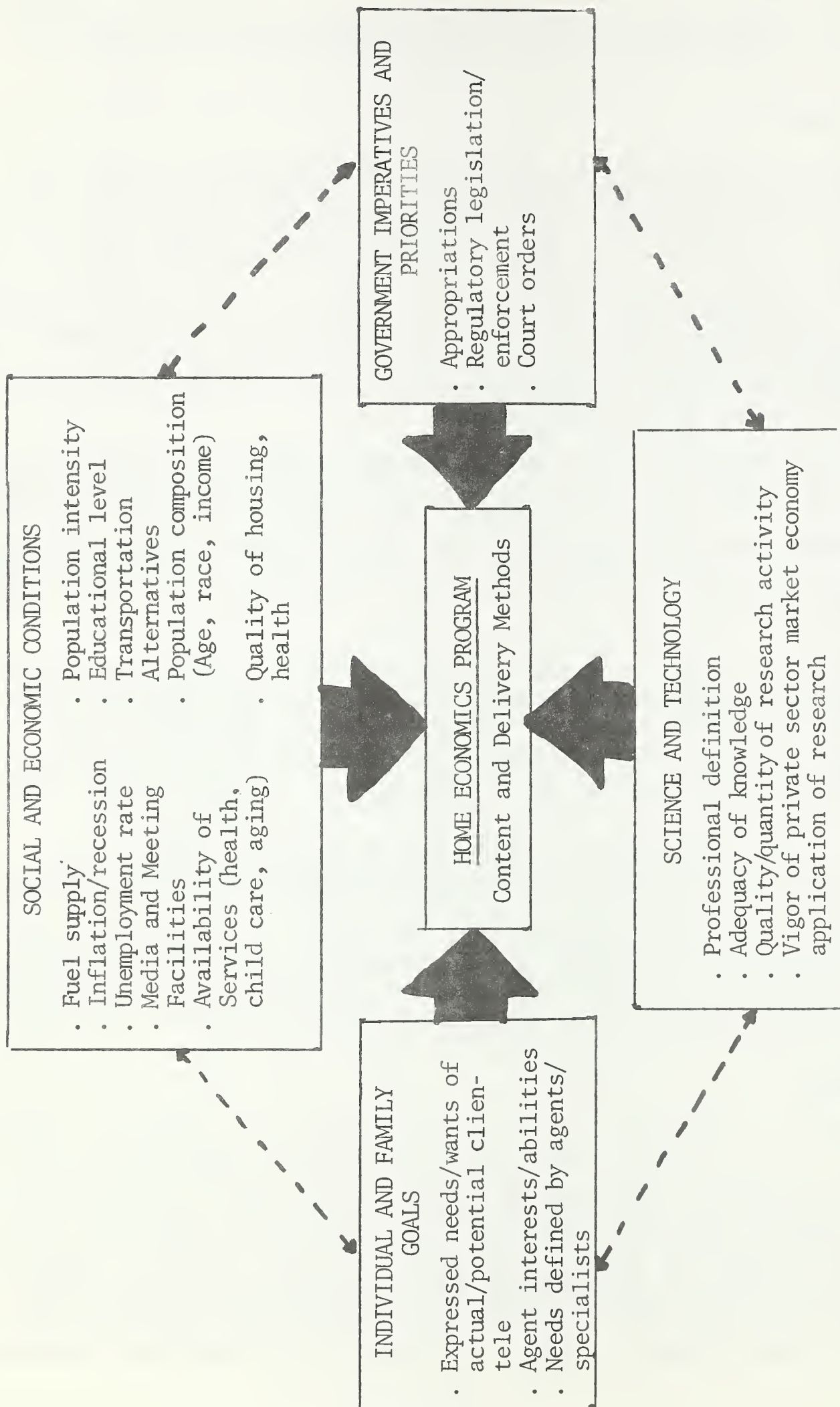
The informational frame in which the Federal Extension office operates is supplemented by authority to review and approve the State plans of work. In this process, modification of State plans to conform to congressional or departmental requirements is requested and negotiated with each State. Monitoring of progress toward agreed upon plans is handled through consultation, interim and annual reports, and cooperative program reviews.

In recent years, the program review process for both the general home economics Extension program and the Expanded Food and Nutrition Education Program has proved invaluable to participating States. The external review of both operational and programmatic issues has been designed to involve State staff members in intensive problem analysis, goal information, and problem resolution. In many States this process has been an effective means of making campus administrators more aware of and committed to the home economics Extension mission and resource needs.

ECOP INPUTS

Comprised of the directors of the cooperating States, the Extension Committee on Organization and Policy (ECOP) maintains a standing sub-committee on home economics and annually appoints representatives from State Extension home economics staffs and administration. This small group is expected to provide review and response to issues raised by the directors, policy proposals presented by USDA, and requests for national training programs. They have also provided authority to initiate requests for interstate cooperation and address, by the directors of issues and conditions affecting the proper conduct of the home economics program. ECOP and the sub-committee recommendations

Figure 1. Examples of Factors Which Contribute to Home Economics Program Formation



are generally perceived to be a means of ascertaining the degree of consensus among Extension leadership and the action of the committee and sub-committee as points of legitimation for action within the States.

STATE INPUTS

In each State, the home economics program administrator and specialist faculty regularly review the status and aspirations of families in the State and the factors which may be advancing or interfering with the realization of family goals. Having assessed these goals and situational factors against available science and technology, one of two actions usually is taken if educational programming appears warranted. If knowledge and resources are available, specific programs of action are proposed. If there is insufficient knowledge, the research need is communicated to academic units which may have interest and capability to undertake necessary research. If there are insufficient resources, special needs funds (USDA) grants and contracts may be sought if it is thought that other agencies of government do not have shared interest in problem addressed. In some cases, existing resources are reallocated if the problem area is perceived to warrant redirection.

In States where Extension faculties are integrated with resident instruction and research faculties, departmental faculty or chairs may participate in this procedure. Depending upon the structure of the university and the willingness of individuals outside home economics or Extension, representatives of other disciplines may also participate. For example, it is common among States with program commitment in family health education to engage medical teaching faculty and/or nursing educators in exploration of program potentials. Similarly law school representatives are consulted in regard to programs on estate planning, wills, insurance, or family law. This involvement often results in the willingness of non-Extension faculty to contribute to program implementation through teaching or publication preparation. Where medical and law schools are not part of the land-grant institution, representatives of medical societies and the Bar are invited to assist.

Some States establish ad hoc or continuing advisory committees comprised of State and county Extension personnel and community influentials who are capable of representing the interests of a segment of the population or bring other expertise to the discussions. This kind of involvement usually generates support necessary to undertake some program activities which demand resources in excess of those which regular funding provide.

COUNTY INPUTS

At the county level, greater numbers of the public are directly involved in all phases of programming -- planning, implementation, evaluation, and reporting. Each of these processes generates information which contributes to program determination. The home economics agent, in cooperation with the county director and with the elected and/or appointed county advisory board and community influentials, identifies and invites potential and actual program participants to assist the Extension program in one or more of these roles.

The greatest number function in planning and implementation processes. In the planning stages, surveys of community perception and needs are sometimes undertaken along with review of prevailing social and economic conditions and trends in the many dimensions of family life. It is not uncommon for representatives of the State Extension staff to participate in the deliberations of citizen groups in order to help establish an adequate understanding of the implications of problems, to ascertain the availability of scientific data relevant to the issues raised, or to become familiar with local issues and views.

Through discussion, priority issues are selected for program emphasis and the most suitable means of program delivery are identified. The plan of work is reviewed by the county director, any governing or advisory body, and the State program leader. While these reviewers have the expressed authority to require modification of the plan, it is generally accepted on the basis that it is the best representation of public need, cultural value, and institutional capacity available.

ISSUES RELATED TO PROGRAM DETERMINATION

Citizen Involvement. The schematic outline depicted below shows the probable outcomes of different planning processes in relation to adult education programs. The author, Stephen L. Brower, shows that the egalitarian involvement of those who are to learn with those who are responsible for instruction results in practical education and is quite distinct from manipulation, classroom pedagogy, or exchange of myths. It is this involvement for both clientele and change agent that is perceived by many to set Extension teaching apart from other educational programs.

Figure 2. Model Defining Alternative Approaches for Education Development for Adults
(Stephen L. Brower)

		Student or People	
		Involve	Not Involve
Authoritative Person	Involve	I Education for Reality	II Academic
	Not Involve	III Grassroots	IV Propaganda

While this process is relatively easy to state in theoretical discussions, it is difficult to activate and maintain in practice.

This is not the framework in which the first Extension home economics programs were determined. In early years, needs, as they were perceived by universities and government, were addressed. In that period of history, there was less distance between scholars and elected and appointed representatives and the general populace. While the people to be educated were not formally engaged in the planning process, they were quite fairly represented through frequent, informal interaction outside the planning process.

As the populace grew, program interests increased in diversity and greater social distance came between university and government representatives and the public to be served. It was necessary to devise a method of adequately measuring learner needs. The current system, although it varies by the strength of the different elements in each planning unit, most nearly combines the critical factors necessary to maintain relevance and program support.

Recognizing that concern for prevailing social and economic conditions, awareness of governmental priorities and availability of relevant scientific knowledge is insufficient by itself to motivate program participation and resultant behavioral change, actual and potential participants are relied upon to identify goals of individuals and families in the area to be served. The co-equal involvement of persons and institutional levels, which have varying but complementary strengths and authority in the total program determination process, assures representation and consideration of the four elements out of which programs emerge. The process is an on-going one which provides maximum opportunity for input by authoritative persons and potential learners. It is in this process and in the funding agreements that the cooperative nature of the program is most evident. Because the citizen groups and local governing boards are a pivotal point in the process, the proper composition of those entities is critical to the outcome. No other activity of government, save the electoral process, is so dependent upon citizen input.

Citizen involvement has facilitated the incorporation of diverse family and home issues and delivery methods. Periods and programs of greatest visibility and impact, however, occur less as a result of diversification and more from intensification. This does not suggest that the full range of home economics expertise is unnecessary to address the problems of families. Rather, it shows that the clarity of problem focus, the specification of the audience in need, and appropriate client involvement are the critical factors in generating impact in the form of increased capacity and behavioral change.

The method is not used uniformly in all program areas. A notable exception is the EFNEP which was implemented without significant citizen involvement in the planning stages. In such instances, the necessary citizen legitimization of the implementation stage is dependent, to a large degree, on the quality and extent of involvement that has been facilitated in the larger program over time.

National Direction. Since the inception of the home economics program, each decade has brought enormous shifts in the socio-economic conditions which have impacted upon families. In each decade, USDA and State program leaders set out to identify these characteristics and give direction to resource allocation in an effort to guide the address of salient issues.

The SCOPE report, FOCUS, and FOCUS II represent these efforts during the past 20 years. The documents, developed by ad hoc task forces, were widely distributed to Extension home economics staff and to significant others in academic units and in community decisionmaking positions which contribute to the content planning and resource allocation processes of the State programs.

In each of these documents, attention was given to prevailing life conditions by which program need could be identified and, if changed coincident to program activity, would indicate program impact. These statements have been effective in stimulating program review and adjustment and involving community and academic resources in planning and implementation of program. While these set the frame for evaluation of impact, few Extension resources were allocated for measurement and essentially no funds within the academic community (including Hatch funds) have been made available to assess needs of families, home and family problem resolution, or Home Economics Extension program impact. With no control over the allocation of research funds and no requirement that Federal funds be allocated to family oriented research, there have been insufficient and ineffective means to expand the research base necessary to undergird programs.

The documents have been used to guide State and Federal staffing decisions which increasingly are the primary means to achieve major program redirection. This becomes a significant factor as the interests and abilities of staff are fed into the program determination process. Table 1 below shows how staffing has changed over the last half century.

Table 1. Distribution by Percent of Professional Staff Time
by Subject Matter in 1925, 1950, and 1977

	Percentage Distribution		
	1925	1950	1977
Nutrition; Food Production, Selection, Preparation, and Preservation	50.0%	33.3%	34.7%
Family Economics; Home Management; Housing, Furnishings, and Surroundings	13.8%	31.6%	34.8%
Textiles and Clothing	31.9%	24.6%	10.3%
Child Development and Family Relations	.....	5.3%	16.1%
Health; Safety and Sanitation	4.4%	5.3%	4.1%

Autonomy. Agency and institutional proximity of agriculture and home economics creates a dichotomy of value. The two program orientations are highly complementary if focused on food and natural fiber consumption. They become more competitive as other dimensions are introduced. The eradication of malnutrition, for example, requires address of issues far beyond increased or modified individual consumption. It is coupled with a concern for all of the conditions which lead to and sustain impoverishment among the numerical minority of the nation and those conditions which accompany affluence for the rest as well as acknowledgment of the impact of one upon the other. Program leadership must maintain a rigid balance of program emphasis in order to retain viability of academic and community relationships which may be needed to sustain or enhance the conduct of program activities. In some instances, that balance precludes intensive programming in identified areas of need,

Earmarked Funds. The influence of special use funds obtained through grants and contracts is reflected in the statistics cited above. The effect of the most significant current earmarked appropriation is not shown, however. Federal funding of the EFNEP and its requirement of conduct through paraprofessionals have dramatically changed the distribution of resources and program emphasis. Table 2 compares the distribution of resources with and without the EFNEP paraprofessionals.

Table 2. Comparison of Distribution by Percent and Subject Matter of Home Economics Extension Staff Resources of Professionals Only and Professionals and EFNEP Paraprofessionals Combined, 1977

Subject Matter	Percentage Distribution Staff Resources	
	Professionals Only	Professionals and Paraprofessionals
Expanded Food and Nutrition Education Program (EFNEP)	15.7%	54.1%
Food and Nutrition (General Program)	19.0%	10.7%
Family Economics, Management, and Housing	34.8%	10.5%
Textiles and Clothing	10.3%	5.3%
Child Development and Family Relations	16.1%	8.3%
Health and Safety	4.1%	2.1%

Recent experience working through paraprofessionals in EFNEP has given evidence of the utility of the early Extension model--intensive, direct, demonstration teaching. Appropriations to employ paraprofessionals indigenous to their locus of work have made it possible since 1969 to recruit and instruct more than 1,694,000 families within the low income population to learn in a small group, or, if necessary, on a one-to-one basis. Evidence is emerging which shows that homemakers successfully reached in this educationally intensive method not only adopt new practices and sustain those behaviors, but are also more willing to seek continuing educational opportunity, to exercise more initiative in that pursuit, and to meet in larger educational settings. This result is not unlike the early steps toward "institutionalization" of informal experience into the Extension Homemaker Club program.

The professional/paraprofessional model has utility in other educational need areas such as energy conservation. The model offers expanded outreach at reduced cost, contributes to reduction of unemployment, and facilitates intensive direct teaching which is most conducive to practice change in the targeted audiences. The need to maintain professional supervision of paraprofessional teaching and the nature of field staffing patterns precludes reallocation of existing resources to expand the numbers of paraprofessional staff.

Divestment of program. Local administrative perspectives and the involvement of citizens often retard efforts to move out of programs which no longer have high national priority unless staff can provide adequate data and incentive to support alternative programs. The special skills required for redirection are sometimes lacking in staff. Staff are frequently penalized for reduced audience numbers that accompany major redirection. Less obvious changes take place easily.

Historically, the foundation of home economics Extension has been food and nutrition education. Early programs emphasized maintaining steady food supplies and safety and sanitation. In periods of national emergency, home production and conservation were stressed. Post-war programs featured variety and comparison shopping for optimum satisfaction. Current programs are tied to societal interest in health and individual concern for economy.

Detailed study of programs of work throughout the history reveal that, underlying all food and nutrition education efforts, there consistently appear three themes. They are:

1. Use in relation to need and resource availability.
2. Obtain adequacy of nutrients.
3. Maintain quality and safety.

Nutrition program success, as measured by participant satisfaction, appears to be correlated to the degree to which an instructional event incorporates information on food preparation. Learner interest is prerequisite to participation, experimentation, and evaluation which lead to behavioral

change. Hence, Extension agents frequently couch nutrition education in the more attractive, appealing context of food preparation.

The consistency of theme or purpose to all food and nutrition education programs has tended to obfuscate the modification of direction that has taken place as social and economic conditions and the available knowledge changes.

EVOLUTION OF SUBJECT MATTER

The history of Extension and the home economics profession run parallel. Both are predominantly American in their development. In the early years, home economics Extension, to a large extent, reflected the growth and development of the profession. Increasingly, however, Extension home economics is viewed as a shaping force within the profession.

Training and Performance of Staff. While the academic segment of the profession has become increasingly specialized as the body of knowledge has expanded, the nature of Extension staffing (basically one agent in each county) has necessitated an integration of knowledge. This major difference in training and function resulted in reduced professional status for the Extension home economist. In a recent survey of significant non-Extension professional leaders, however, Extension home economists were generally perceived to have improved in professional quality over the past 10 to 15 years.

Table 3. Distribution by Percent of Non-Extension Professional Leaders' Perception of Extension Home Economists' Academic Quality Compared to the Past, 1979

	Much Higher	Somewhat Higher	About The Same	Somewhat Lower	Much Lower
Academic Quality Compared to Past	36.35%	50.0%	9.09%	4.55%	....

When asked how Extension home economists academic training compared to that of other home economics professionals, most indicated that it was similar. In a comparison of professional performance, however, the leaders scored the Extension home economist above other professionals.

Table 4. Distribution by Percent of Non-Extension Professional Leaders' Perception of Extension Home Economists' Academic Training, Performance, and Status In Comparison to Other Professionals, 1979

	Much Higher	Somewhat Higher	About The Same	Somewhat Lower	Much Lower
Academic Training	4.55%	31.81%	59.09%	4.55%	.....
Professional Performance	9.09%	54.55%	31.81%	4.55%	.....
Status in Home Economics Profession	4.55%	27.27%	54.55%	13.63%	.....
Status Among Professionals in Other Disciplines	4.55%	13.63%	63.64%	18.18%	.....

To verify the strength of commitment to these expressed perceptions, the leaders were asked the extent of value they would place on Extension experience of an applicant for employment in their own organizational unit. Again, there was evidence that Extension home economists are perceived positively.

Table 5. Distribution by Percent of Non-Extension Professional Leaders' Preference for Extension Experience Over Other Employment Experience in Applicant Credentials

	Much Greater	Somewhat Greater	About The Same	Somewhat Lower	Much Lower
Value of Extension Experience Over Other Employment Experience	9.52%	38.10%	47.63%	4.76%	.....

A growing number of Extension home economists are pursuing advanced degrees. The ability to conduct and interpret research is the primary focus of graduate study programs. With expanded numbers of professionals with research capabilities and specialized training, program quality can continue to increase. Some greater local program autonomy also emerges as staff competence increases. This is reinforced by the program determination

process in which potential and actual learners help to shape program on the basis of their educational preferences and their perception of what the Extension home economist can offer.

Linkage to Academic Base. One of the most significant advantages of Extension home economics' linkage to the land-grant universities and their academic divisions is the opportunity and requirement to subject Extension publications to expert review. This process gives some assurance that materials such as bulletins, video-tapes, and slide-scripts developed by State Extension specialists are scrutinized for accuracy of content by persons not employed in Extension, academically respected in the field addressed, and legitimately concerned that information disseminated by the university be worthy of its endorsement.

This same process is sometimes an obstacle to quick response to public need and, in the case of materials for low literacy audiences, to the production of needed items. With fewer faculty in land-grant institutions who are familiar with and committed to the Extension mission, it is often difficult to obtain review which is sensitive to the differences between classroom instruction on the university campus and the informal educational arena in which the Extension program is conducted.

As departments fail to produce needed materials, county Extension home economists tend to rely more upon those that are commercially developed which may lack necessary objectivity and indepth analysis of alternative course of action. There is little ability in Extension to underwrite the cost of materials that are as attractively presented as those commercially produced and distributed. Charging participants for materials, though widely discussed, is generally perceived to be impractical since most Extension centers are not set up to handle a cash flow. Further deterrents to material sales are the economic status of a large segment of the home economics program audience and the unacceptability to university personnel to engage in marketplace activities.

Academic linkage impacts uniquely upon the specialist officed on the campus. While the formal association is one that is intended to assure quality, participation in promotion and tenure review systems that are dominated by standards appropriate to resident instruction and research can severely weaken the contribution to Extension. Academically, great emphasis is placed upon publication in refereed journals in consideration of promotion and tenure awards. While most Extension publications are subjected to review comparable to those of refereed journals, the Extension teaching milieu demands far less esoteric and considerably less complex presentation. Hence, those responsible for the production of Extension teaching materials tend to be placed in occupational jeopardy whether they conform to the norms of the academic setting in which they are employed or to the requisites of the mission. This problem is most severe in the home economics program because of the significant amount of program activity directed toward youth in 4-H and lower socio-economic adult groups. The level of sophistication of the major target audiences requires less theoretical discussion and more direct application of the principles of science and technology than is respected in academic circles.

Impact of Evaluative Studies. Although the diverse nature of the program precludes on-going comprehensive program evaluation without significant resource allocation which would reduce program outreach, major attention is being given to the measurement of impact of selected programs. This kind of effort has a two-fold purpose -- to improve the effectiveness of programs and to inform funding sources and others responsible for the conduct of programs.

The introduction of computerized reporting in the 1960's dissipated the depth and accuracy of accomplishment reporting and thus weakened periodic review as a basis for program improvement. Worse, it gave legitimacy to activity oriented programs at the expense of goal-oriented performance. It appears that this trend began to reverse in the mid-1970's and goal achievement now occupies a priority position in program planning processes, staff training, and development efforts throughout the nation.

With the increase of research capabilities of Extension personnel, there appears to be growing demand of evaluative procedure as a means to report effectiveness and to improve program planning and implementation. Most research conducted to date has been done through independent efforts undertaken as part of advanced degree study programs by Extension personnel. A second major source of evaluative data is program financed through special need grants from USDA and other public and private agencies. The data from special projects have been the more widely disseminated. Because of the rigidity of the funding formula and the budget allocations,⁴ however, neither has had dramatic or immediate impact in the form of program replication.

States have cooperated in Federally funded studies to develop the necessary framework for evaluations, the findings of which could be compared and, in some instances, be cumulative. Representatives of all subject matter areas were engaged in the identification of indicators of impact. The results of this undertaking are significantly influencing the quantity and quality of evaluation efforts and program activities throughout the nation.

For almost a decade, all projects approved for Federal special needs funds have been required to include specific evaluation plans. In some instances, the evaluation process has been subcontracted to external organizations.

Studies demonstrate that there has been a tendency to underestimate rather than overestimate the impact of Extension home economics endeavors. An external review of studies undertaken in the past five years shows that there is a high degree of reliability and validity for both internal and external evaluations. This evidence will further reduce the inherent resistance of staff to subject programs to rigid scrutiny.

An example of evaluation revealing extended impact is found in a recent study of a Massachusetts program to teach public housing residents knowledge and skills related to consumer practices. Two control groups were tested as well as the group which received the benefit of direct teaching. All groups were representative of the total population targeted and scored equally on a pretest of knowledge. On the post-test, however, program families

demonstrated a significantly higher knowledge of sound consumer practices. Both control groups also demonstrated an advance of knowledge.

Table 6. Mean Pre-Test and Post-test Scores of Experimental and Two Control Groups Studied in Relation to Extension Home Economics Consumer Education Program, Massachusetts, 1975

Pre-test Scores	Post-test Scores		
Experimental and two control groups	Experimental Group Program families from housing complex with learning center.	Control Group A Nonprogram families from housing complex with learning center.	Control Group B Nonprogram families from housing complex without learning center.
$\bar{x} = 5.3$	$\bar{x} = 7.5$	$\bar{x} = 7.0$	$\bar{x} = 6.2$

It is likely that the administration of the pre-test had some effect upon the post-test scores in all groups. It is just as likely that the control groups experienced increased knowledge from controlled news releases and, more importantly, from a diffusion process between program and nonprogram families.

A different approach was used in a recent Louisiana study of a residential energy conservation education program. Hence, researchers measured the behaviors affecting energy consumption among the targeted population, the Extension home economics staff and volunteer inputs to the conduct of the program, and the knowledge and application of practices before and after the program among both participants and nonparticipants. Examples of the data reported demonstrates the impact of program upon behavior.

Table 7. Percent of General Audience and EFNEP Clientele Practicing Selected Energy Related Behaviors Before and After Participation in Extension Home Economics Residential Energy Conservation Education Program, Louisiana, 1978

Selected Behavior	Audience Type			
	General Population		EFNEP Homemakers	
	Before	After	Before	After
Looking for and Reading Energy Labels	23%	77%	9%	52%
Combining Shopping Trips to Reduce Fuel Consumption	51%	90%	36%	82%

In addition to these advances in knowledge among program participants, it was reported that there was a significantly higher adoption rate among program participants over nonparticipants. The study also demonstrated that practices are carried out with considerable regularity by those who reported changed behavior.

Table 8. Percent of Regularity With Which General Population and EFNEP Clientele Practiced Selected Behaviors Following Participation in the Residential Energy Conservation Education Program, Louisiana, 1978 .

Selected Behavior		Frequency of Practice Application		
		Always	Often	Sometimes
General Population	Looking for and Reading Energy Labels	50%	37%	13%
	Combining Shopping Trips to Reduce Fuel Consumption	61%	29%	10%
EFNEP Homemakers	Looking for and Reading Energy Labels	85%	11%	4%
	Combining Shopping Trips to Reduce Fuel Consumption	42%	27%	31%

The kind of evaluative process used in Massachusetts is most useful to those who are centrally involved in program conduct and administration for it has implications for program improvement. A much broader measure of impact as carried out in the Louisiana project is more useful to those who appropriate and direct funds. Both contribute significantly to the quality of subject matter offered through Extension home economics.

One of the most perplexing factors related to any assessment of impact of the home economics Extension program is the impossibility of determining what did not occur in families as a result of program involvement. Did families experience lower rates of drug abuse, teenage pregnancy, diet related disease, suicide, marriage dissolution, bankruptcy, and the like? Studies showing lower incidence of these situations among home economics program participants do not indicate the degree to which the program contributed to prevention of dysfunctional behavior. Some critics suggest that home economics Extension programs attract those families which have the least tendency toward these problems. There is no validation of that claim.

Use by Others. One measure of the suitability and quality of Extension home economics is the degree to which media outlets, electronic and print, are willing or seek opportunity to incorporate the material into their releases. Almost every Extension home economist engages in weekly radio and/or television programming. Most also prepare regular newspaper columns and news releases. The rate of use by local stations and publishers is high. The requirement for all broadcasters to provide public service programming contributes to this use. Broadcasters generally are receptive to Extension Home Economics releases for three reasons:

- . there is a local resource to handle inquiries;
- . the material carries identification with the university; and
- . the material has appeal to a broad public.

Still another measure of the value of Extension material is use by independent authors and publishers. In recent years, some private citizens have reproduced Extension home economics publications for sale to the public. The incidence of this is limited by its very nature. The practice is discouraged by Extension home economics personnel because of the cost to the public, but there is no effective action available to prevent duplication or sale of materials in the public domain.

Because use by others denotes approval and recognition, the choice of items for use contributes to the choice of content for future releases by Extension home economists.

BUDGET

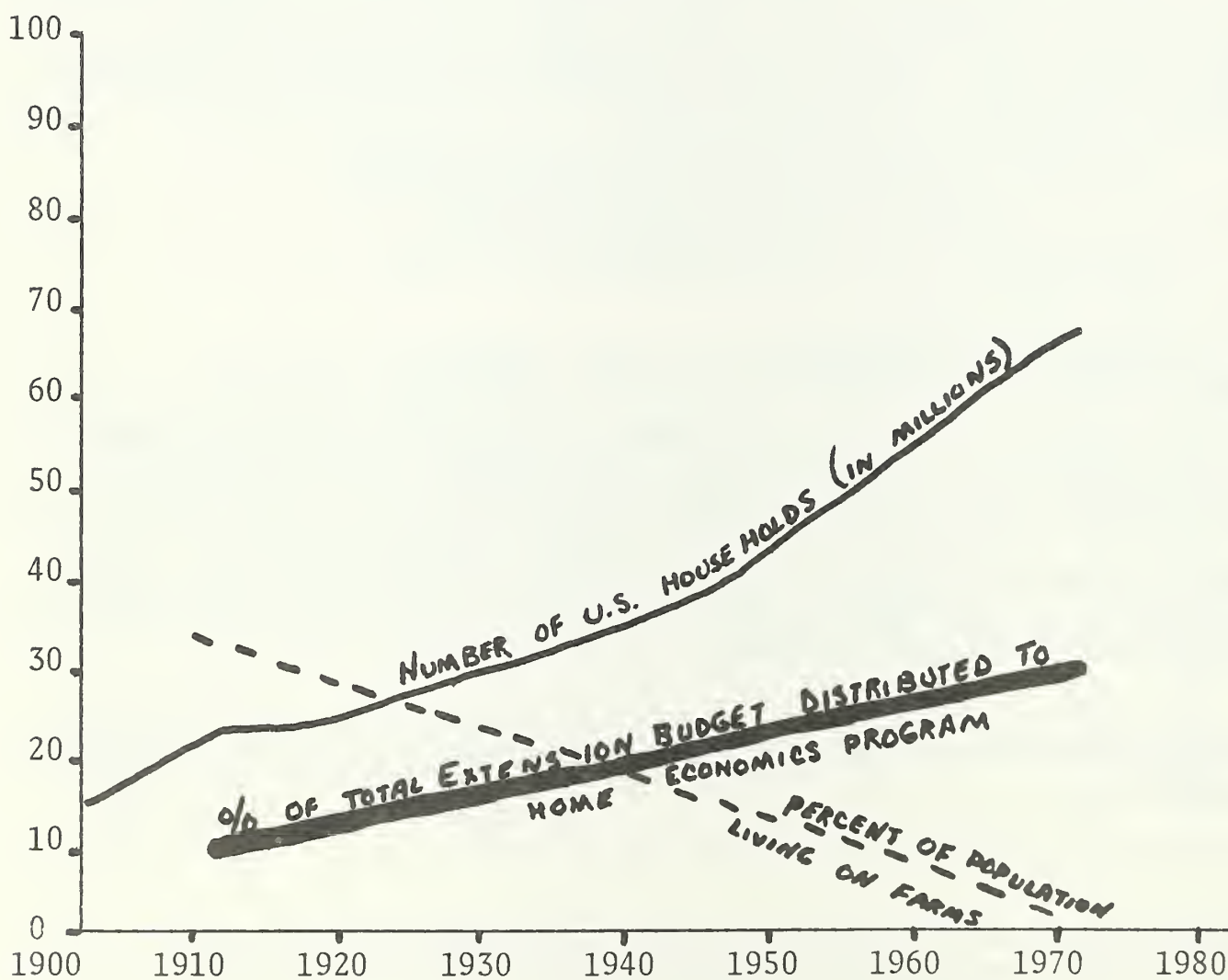
Prior to the passage of the Smith-Lever Act, USDA funds were not made available for home demonstration work among adults and youth as they were for agricultural Extension and boys' clubs. Support was obtained from the general Education Board.

In 1977, 30.1 percent of the total Extension budget was distributed to the home economics program. This figure represents a wide variation among the States. Percent distribution in support of Home Economics Extension ranges from 15.1 percent to 49.2 percent of all contributed dollars.

Of the 1977 funds distributed to home economics, nearly one-third were derived from the Federally earmarked appropriations to the Expanded Food and Nutrition Education Program. When nonformula Federal and other earmarked funds are excluded from the calculations, the percent distributed to home economics is slightly over 20 percent.

This current distribution represents an increase over the 9.1 percent of funds given to home demonstration work from the first Smith-Lever appropriation. It is correlated with the decline of percent of population living on farms, but is not with the substantial increase in the number of U. S. households. (See figure 3).

Figure 3. Comparison of Growth in Number of U.S. Households, Percent of Total Extension Budget Distributed to Home Economics Programs, and Decline in Percent of Population Living on Farms



The formula on which Smith-Lever funds are allocated to States has little or no relationship to the target audience of the home economics Extension program. Except for the period immediately following World War I, when urban home economics work was curtailed, this factor has impeded development of programs sensitive to the social and economic conditions impacting on families, for migration to urban and suburban areas has had a significant influence on functions of families, roles of family members, and relationship of families to the marketplace and government itself.

It is not reflective of government analyses which show the value of household labor to be worth almost 50 percent of all after-tax labor in the United States. It does not relate to the fact that the value of household wages is equal to nearly two-thirds of the gross wages paid by all U.S. corporations as illustrated in table 9.

Table 9. Household and Market-Labor Income Compared,
1968

Source	Billions
Total Wages and Salaries	\$ 465
Total Corporate Wages	320
Total Household Wages	212
Total Women's Household Wages	155
Total Manufacturing Wages	146
Wages of Women at Home Only	124
Federal, State, and Local Government	96
Wholesale and Retail Trade	75
Services	56
Contract Construction	27
Finance, Insurance, and Real Estate	22
Transportation	21
Communications and Utilities	13
Mining and Farming	8

Source: Statistical Abstract of the United States, 1972; Gauger, "The Potential Contribution of the GNP of Valuing Household Work."

The funding rationale is not related to the increased ratio of household assets to liabilities which has increased significantly since 1960, as depicted in table 10.

Table 10. Estimated Consumer Balance Sheet
(in billions of dollars)

	1960	1965	1970	1972
<u>Household Assets</u>				
Nonfarm home ownership	406.0	495.8	689.4	756.4
Value of Consumer Durables	<u>164.8</u>	<u>209.2</u>	<u>277.4</u>	<u>316.2</u>
Total Assets	570.8	705.0	966.8	1,072.6
<u>Household Liabilities</u>				
Mortgage debts	125.1	194.6	259.5	317.9
Consumer credit	<u>56.2</u>	<u>90.3</u>	<u>126.8</u>	<u>156.4</u>
Total Liabilities	181.3	284.9	386.3	474.3
<u>Household Net Worth</u>	389.5	420.1	580.5	598.3
Ratio of Assets to Liabilities	1:3176	1:.4041	1:.3996	1:.4422

The formula is no more reflective of social data such as rates of divorce, separation, child abuse, poverty, and crime nor of scientific estimates of the social and economic cost of diet related disease, unsafe housing, or bankruptcy.

EFNEP funds are allocated and distributed on the basis of relevant social and economic data. As reported in the departmental budgetary documents, the departmental budget requested in 1974, 1975, and 1977 recommended reduction of these funds. Such request was denied by Congress, and in the Food and Agricultural Act of 1977, Congress authorized expansion of the EFNEP and "other appropriate nutrition education programs." Further, the allocation of funds was mandated to be made on the basis of "population living at or below 125 percentum of income poverty guidelines prescribed by OMB as compared with all States."

AUDIENCE

Farm Wives. From the beginning, the mission of home economics has been focused on home and family, but the particular manner in which the audience has been targeted has greatly influenced both the content and the delivery of programs. In the 1900's through the 1920's, programs were addressed to farm families. Even in this early period, some "city agents" were employed, but they constituted less than 20 percent of the total at any given point in time and were maintained at that level only in the emergency period of World War I.

Immediately following the war, the urban staff was reduced to less than one percent of the total assigned to home economics programs. Both men and women of the farm family were taught through the "farmers institutes," but the depth of subject matter was taken almost exclusively to women. Where the home economics topics were presented to the entire institute assembly, only one or two sessions of the total program were "devoted to home affairs."

When it became established that home economics was to be an integral part of each State Extension Service, home economics personnel were admonished to build their program around young girls in canning clubs. It was thought by leaders of the Extension movement that any direct approach to a homemaker to improve her ways would be perceived by the husband as an affront to his wife's capacity and a threat to his role as head of the household. The work with girl's clubs and the adult women who were needed to serve as adult leaders (necessary to extend the work to numbers beyond the agent's capacity to reach) allowed for much direct instruction of farm wives, however.

As farm wives participated, they became more aware of the importance of the home in relation to the farm. Increasingly, they perceived themselves first as "housewives" and later as "homemakers."

Study Groups. As early as 1917, 1,350 study clubs had been organized. Total membership in these groups was over 19,000 homemakers and represented 33 States. The groups were not joined in an association, however, until 1936 when 7,000 homemakers meeting in Washington, D. C., established the National Home Demonstration Council.

The formation of this group had a dramatic impact upon program for it developed an ideal framework in which program could be conducted with continuity--a prerequisite to depth and breadth of educational programming. As such, it became a primary audience, along with 4-H clubs, through which program was delivered. Homemaker groups reached their zenith membership in the 1950's when membership numbered more than 1.25 million. Providing student loans, scholarships, and cooperative campus housing; obtaining research and action grants; and providing educational leadership necessary to expand health and social services in their respective communities were high points of association activity.

Through a national study, it was found that the membership was typical of the national population except for women under 30 years of age. Fewer young women participated in Home Demonstration Clubs. At least 80 percent of the members had an income less than the national median. Three out of 10 reported low incomes (less than \$1,500/yr.); while 2 out of 10 reported high incomes (more than \$5,000/yr). More club women reported high school completion and some college study than the general population. Major discrepancies between the Extension Homemaker Club membership and the national population occurred in two areas --racial/ethnic composition and place of residence.

Since club groups were neighborhood-based, there was little racial/ethnic integration. Further, except for the southern States, which had a dual system of employment and program for whites and blacks, few of the minority populations were represented.

Over one-half of the Homemaker Club membership lived on farms and ranches while another 28 percent resided in rural areas or towns of less than 2,500 people.⁶ Sixty-five percent of all U. S. families lived in urban areas; Homemaker Club members numbered only 21 percent living in towns and cities of more than 2,500 people.

State leaders were encouraged and, in turn, encouraged their staff members to reach out to more urban and young homemakers. It wasn't until the 1960's that a similar thrust to reach minority populations began.

The result has been a steady decline of membership through the 1960's and into the 1970's. The 1978 membership stands at 546,500 homemakers in 33,142 clubs in 42 States. While this figure represents a significant reduction in numbers, membership in NEHC exceeds that of almost all other national adult voluntary associations.

Table 11. Extension Homemaker Club Membership by
Selected Years, 42 States

Year	Number of Members		Year	Number of Members
....	.....		1970	653,651
....	.....		1971	643,255
....	.....		1972	638,834
....	.....		1973	608,818
1964	851,067		1974	583,925
1965	760,775		1975	557,528
1966	800,758		1976	569,433
1967	787,157		1977	566,368
1968	731,206		1978	546,505
1969	663,417		....	.....

While NEHC has launched a variety of membership appeals, the national reduction of interest in obtaining information through attendance at meetings has countered these efforts. The overall net loss of membership has been reduced, however, by the enrollment of new members, one source of which is the clientele from the Expanded Food and Nutrition Education Program.

Pressure continues to be exerted to modify the degree of Extension support to members of the Homemaker Club program. It is proposed that since this particular audience has alternative means to satisfy their educational interests and that the audience is not representative of the total population, Extension investment is not warranted.

Those who remain in Homemaker Clubs continue to be the primary source of volunteer leadership to the total program including EFNEP. Members, while they also belong to other organizations, find the Extension program to be the most viable means to satisfy educational and community service interests.

The membership profile shows the group to be older and somewhat more affluent than the general population. In the view of some, it is these very differences that facilitate the group's service to the total program. In the last few years, the group has cooperated in specific efforts to recruit young homemakers, offer membership to men as well as to women, and to sponsor new units among progressed EFNEP homemakers and others living in poverty. Within the activities of the homemaker program, citizens of all socio-economic strata can interact in arenas of common interest and in egalitarian roles--which reinforces the general programmatic effort to reduce the effects of poverty and improve the quality of life for families.

The constitution of the National Extension Homemakers Council articulates its purpose as one of sponsorship, support, and facilitation. In so far as the council is an autonomous entity, decision to intensify any aspect of its program remains with the organization. However, it is evident that the membership will choose to respond to such a challenge if they can expect a degree of reciprocity through expanded training opportunities.

Urban and Young Families. As the audience focus shifted from rural to urban, with emphasis on young homemakers, new delivery methods were needed to reach the great masses. Urban populations, particularly young homemakers, do not respond to meetings. They know little of the traditional "project leader" model, which multiplied the effort of a single agent. Further, the social organization of urban areas does not facilitate its use.

Radio, television, newspaper, and exhibits were viewed as partial answers to the need. These forms of program delivery could be counted on to reach into almost every household, but they limited the program to one of information dissemination rather than the direct educationally intensive approach which was possible in small groups or one-to-one teaching.

This narrowing of effort to information dissemination has caused some to call for a return to the rural only focus. Those who support limitation to rural areas tend to identify with the more conservative farm and commodity organizations. In general, they believe that Extension Home Economics program efforts in urban areas are a recent phenomenon and that urban participants divert the original intent of the legislation from education to advocacy activities.

Urban home economics efforts originated in the first decade of Extension programming under the Smith-Lever legislation. They followed the population

out-migration from rural areas stimulated by advances in agricultural technology. The shift was not in proportion to that of the population, however. With the financing of the EFNEP and urban gardening by the Congress and use of local funds, the urban trend recently has expanded past a rather superficial program effort.

There is no evidence that the program has drifted from one of education to one of welfare or advocacy as feared. The reliance on media to answer program demand and the resultant reduction of the educational thrust to one of information dissemination appears to have had the most damaging effect upon program. Decreased reliance upon the demonstration technique fostered increased dependency of users of the service and diminished the public's awareness of the source of program materials and personnel.

The advance of transportation and media systems precludes the limitation of a program orientation to rural areas unless extensive and counter-productive eligibility criteria are established and the means of enforcement are provided. Such a measure would increase cost, reduce public support, and significantly impair cooperative relations with other Federal, State, and local agencies.

Low-Income Families. Home economics Extension has always addressed the lower and middle income strata of the population. In the early years, through the depression and, again, in the late 1960's to the present, special emphasis has been given to the poor. More than one-half of the current professional and paraprofessional home economics staff is specifically assigned to EFNEP, which is limited to poor families. Additional staff time is given in support of small farm family programs in some States; to consultation and training of paraprofessionals in health and welfare departments in some other States; and, in still others, to special short-term educational projects cosponsored by local agencies, churches, or organizations.

While EFNEP is generally aimed at families with young children, other efforts do not embody age constraint. In recent years, there has been a growing emphasis on education of senior citizens to assist in their adjustment to the later years of life. Attention has been focused on aspects of living on reduced and fixed incomes in an inflationary economy. Much of this work is carried on through other community agencies and services such as congregate feeding sites and area agencies on aging, or through local church and social organizations.

Those who propose limitation to the cause of the poor cite references to the eradication of poverty in the early writings and Congressional discourse. They believe that a concentration of resources would facilitate cooperation of the hard-core poor into educational pursuit. In practice, it has been as difficult for Extension to reach the hard-core poor as it has for other new or old agencies of government. The difficulty has been far greater in the urban areas than in the rural ones where Extension personnel can be and are more visible. This is not to say there has been no effective address of the targeted audience in urban areas. Many are involved successfully, particularly through EFNEP, the Urban Gardening Project, and other specially funded programs. The difficulty lies with the inability to concentrate

resources on the targeted families who are confronted by a multiplicity of problems. Frequent and intensive individual instruction is necessary to achieve results.

ISSUES RELATED TO AUDIENCES

Any discussion of audiences immediately entails consideration of delivery methods, since the methodological approach is a primary determinant of the success by which a significant portion of a specific audience can be reached.

Media: While recent reliance upon print and electronic media resulted in reports of considerably more people contacted, there is decreasing evidence of the effort accomplishing more than heightened awareness among the public.

The pressure to expand home economics programs to all potential beneficiaries was not accompanied by any substantive changes in resource allocation. Modifications of program came in the form of different planning processes and delivery techniques which precluded the effective involvement of those to be taught. This served to weaken the assurance of both quality and relevance. It diminished the possibility of consistent, thorough observation and record of accomplishments. Agents have reported the number of classes taught, broadcasts made, and column inches written; but they could not specify the conditions giving rise to or resulting from program. The intensity of interaction between teacher and learner was replaced by an extensity of delivery. The extent of outreach is notable, however. Through radio public service announcements, news programs and other programming, Extension county home economists and State specialists in one State on one day reached an estimated 885,616 listeners with about 2½ hours of air time. Extension home economists all over the country do daily and weekly radio programs, PSA's and news segments reaching millions of listeners on a regular basis.

With State-produced television shows and participation in local commercial television programming, Extension home economists and State specialists in one State on one day reached an estimated 53,000 viewers with 76 minutes of air time. Extension home economists all over the country do daily and weekly television programs, PSA's, and news segments reaching millions of viewers on a regular basis.

Unfortunately, there is no effective means that is not extraordinarily costly to measure the true value of this media effort in bringing about any practice change. Programming budgets are also minimal and do not facilitate productions which can compete with commercial releases in terms of audience appeal.

Multipliers of Knowledge. Except for the years prior to 1920, and the initial years of the EFNEP, home economics program reliance on one-to-one teaching has been limited. The large number of persons demanding program, insufficient paid staff, and an awareness of the value of peer reinforcement made possible through group instruction led staff to encourage local organization. As these groups proliferated, still greater sufficiency was required and a variety of multiplier techniques was developed.

The primary group which extends the outreach of Home Economics Extension programs is the Homemaker Club discussed earlier. Additionally, representatives of public and private agencies and organizations which share interest in the family are joining in this means of bringing knowledge and skills to their respective constituencies.

The use of multipliers reduces the degree of control over accuracy of content and quality of teaching method. It is also difficult to retrieve the quantity and type of data necessary to validate impact upon family member behavior. The use of paid paraprofessionals increases the degree of control over the teaching while also reducing the cost/person contacted. (See table 12 below.)

In the case of EFNEP, there has been a gradual move away from the original one-to-one teaching method as the confidence of target audiences and paraprofessionals and the utility of the program has been demonstrated. While small group teaching was stimulated by static funding during an inflationary period, the continued use of this method should have significant value in leading enrolled homemakers toward participation in the mainstream home economics program in which their own volunteer leadership and group instruction are the primary modes of delivery.

Table 12. Comparison of the Efficiency and Effectiveness of Selected Characteristics of the Primary Delivery Methods Used in Home Economics Extension

Characteristic	Professional				Supervised Paraprofessional		Trained Volunteer or Multiplier	
	Media	Large Group	Small Group	1-1	Small Group	1-1	Small Group	1-1
Cost/Person Contacted	low	mod	mod	high	mod	mod	low	low
Control over Content Accuracy	high	high	high	high	mod	mod	low	low
Depth of Instruction	low	mod	high	high	mod	mod	low	low
Access to Impact Data	low	mod	high	high	mod	high	low	low

Demonstration/Diffusion Model. The teaching model that characterized early Extension and has proven the most effective in bringing about practice change is that of demonstration and diffusion. In this approach, the process is begun by widespread information dissemination to create awareness of need and the availability of solutions to selected problems. The agent or her

representative then identifies one or more persons who are potential early adopters. Intensive instruction is provided to these targeted few. They are assisted through experimental stages and once the recommended practices are proven successful, opportunities are created for the adopters to show others how they have benefitted. As others witness these "object lessons" and request information to apply the principles to their own situation, they are provided instruction. Usually, they require less intensive instruction since they are already convinced of the utility of the practices. Most of this later teaching can be done in group settings or through media instruction. While the model is more costly than some other approaches, there is greater probability of practice change and permanent benefit to the learner. (See figure 4.)

Lever proposed this method in his appeal for Congressional support of the first enabling legislation. He understood that the method required educationally intensive action for he identified the assumptions underlying the model.

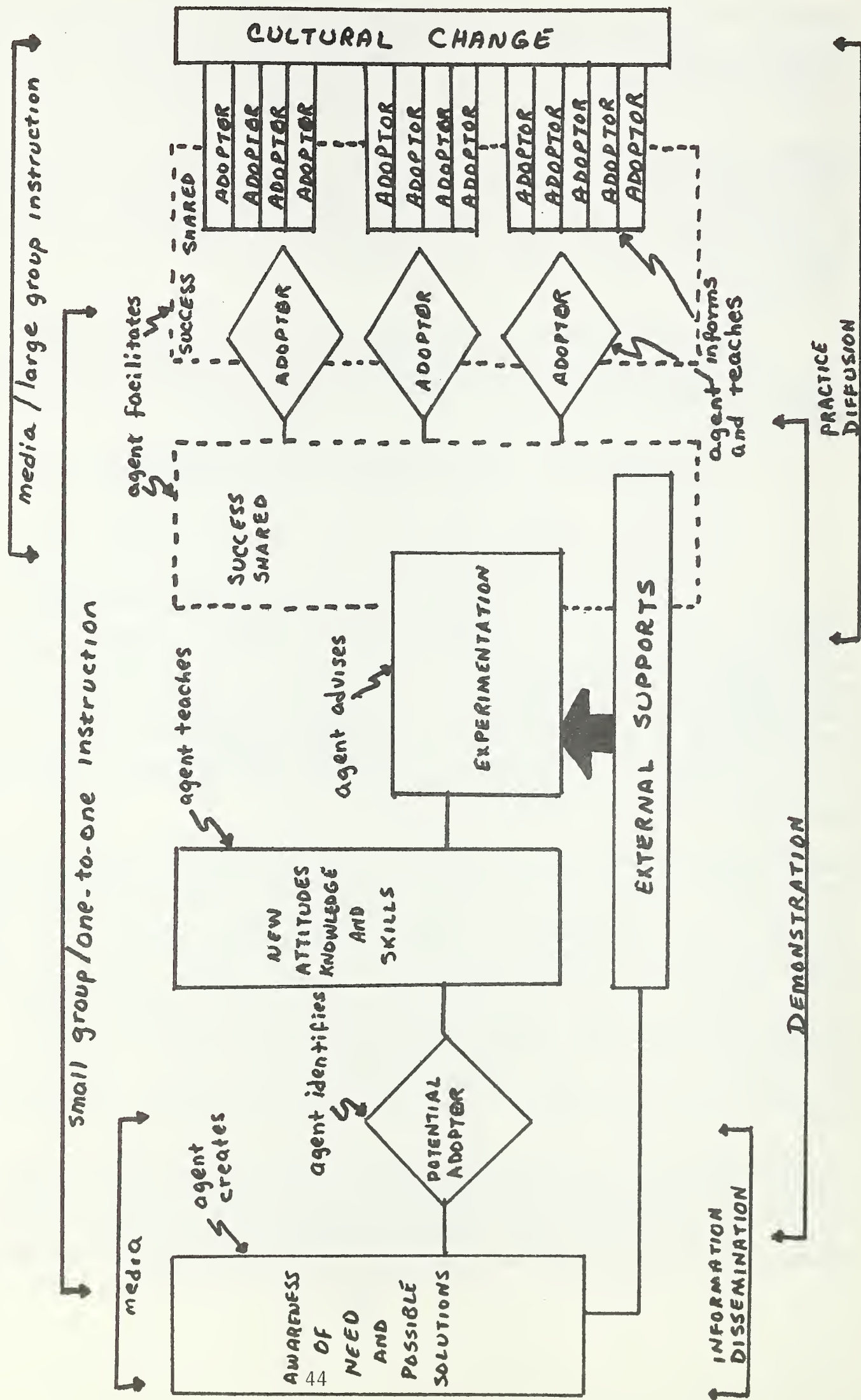
The fundamental idea of the system of demonstration . . . presupposes the personal contact of the teacher with the person being taught, the participation of the pupil in the actual demonstration of the lesson being taught, and the success of the method proposed. (Lever, 1913)

The method was always more popular in agricultural Extension than in the home economics program, since the dollar value of practice changes on the farm was more easily documented and could be shown to off-set the cost of education which brought about the changes. If the method is judged exclusively upon the increased income accruing to the program participant, then surely it is not warranted in the home economics program. If, however, the intent is not only to bring about change in the life of the individual or family, but also to create change in the total social and economic situation, then the model has a place in home economics.

The pressure to reach large numbers of people exercises a pull on program energies that is counterproductive to the realization of program intent. Historically, it appears that the most productive orientation is toward families who, with moderate stimulus, are willing to engage in a joint endeavor to solve problems related to family and home. In this orientation, it is possible for Extension home economists to mount a thrust in their unique roles as capacity builders and stimulators of practice change. If successful, benefitted families move out from positions of dependency upon the Extension and other compensatory programs and into positions of self-sufficiency and, possibly, of additional program resource--thus, increasing the base necessary to expand services into new geographic and content areas.

A program, which has as its primary goal to assist any specific group of families to adopt practices which would significantly improve their social and economic condition, is dependent upon the sanction and investment of the larger society. Just as in the first Extension demonstration, farmer Porter found promise in the banker's willingness to share risk, so the limited

Figure 4. Relationship Between Information Dissemination, Demonstration Method and Practice Diffusion Leading to Cultural Change; Role of Agent in Progression; and Primary Methods Employed



resource family can be induced to take action when it senses that it has become the object of social attention, has access to information salient to its problems, and receives the systematic educational support to apply that information to its own need. Work in this mode with this kind of audience necessitates a relatively low agent-teacher/client ratio.

Among those who are especially concerned about behavioral change, there is recurring interest in the demonstration method which proved so successful in the first four and one-half decades of Extension work. The proponents of this method recognize the necessary diminution of audience numbers inherent in such a move, but they call attention to the unique potential for bringing about practice adoption which could significantly change social and economic conditions.

An outstanding example of the effectiveness of the demonstration technique is found in the Iowa Extension history. During the periods of war and the intervening depression years, a key volunteer leader was identified in each four mile square. These persons, chosen on the basis of their tendency to be early adopters, were taught the basic skills and concepts in the selected program topics and then assisted to teach others in their respective geographic area. Replication of the model at this time would necessitate drawing up suitable geographic plans and processes by which appropriate key leaders could be identified and recruited to service. Within the framework of the EFNEP and urban gardening program, there is potential experimental ground to retest the model for its availability and efficacy in modern times.

Given the renewed commitment to populations in greatest need, audiences comprised of previous program beneficiaries could be trained to serve in the outreach capacity. If fewer than 10 percent of the currently enrolled Home-maker Club members would agree to function in this manner, the present outreach to the poor could be doubled.

It appears that greater emphasis should be given to this method without abandoning the more cursory information dissemination function completely. It is through media efforts that new participants are attracted, larger public support is generated, address of emergency situations (excluding flood, water, and energy shortage; food poisoning prevention) can be most efficiently managed.

Because practice adoption and sustained behavioral change also stimulates the onset of the diffusion process, it is essential that State and local Extension systems continue to have some information dissemination function. Consideration should be given to some efficient and quality-enhancing alternatives in this activity, however. Consolidation of the function on nonprofessional staff to produce releases and process requests should be considered. Placing the function entirely at the Federal level would eliminate the possibility of appropriate referral and followup program involvement required in the diffusion process.

Individual Practice Change or Cultural Change. One of the greatest dilemmas evident in the history of home economics Extension is the delineation of target audience. All families contribute financially to the program and,

it can be argued, should derive direct benefit from educational efforts. All families are affected by prevailing social and economic conditions and both contribute to their existence and determine the outcome of any proposed change. Programs for the many tend to be shallow because there are insufficient resources to provide adequate staff numbers. Programs for the few, particularly if they are directed to the poor and disenfranchised, require the support of those with resources of positive experience, money, and power. Individual practice change, if widespread enough, can lead to cultural change. Cultural change is necessary to sustain individual practice change and further stimulate individual practice adoption. It is relatively easy to teach new knowledge and skills. It is more difficult to foster new attitudes and aspirations because they are culturally linked and sanctioned by the views of the larger society. It is most difficult to generate changes in dominant culture; e.g., the norms and sanctions imposed by the controlling majority.

For example, at the time of the original enabling legislation, the dominant program need lay in rural America. By contrast to those who resided in urban settings, these families had few social or material benefits. They were seen, however, to be a critical force in the industrialization of the nation. Their urban kin still sensed their roots in the countryside. The eradication of rural poverty was a goal to which all could readily agree.

Intensified address of malnutrition among the poor, beginning in 1970, was not as generally accepted. Extension Home Economics support groups and local governing boards perceived this massive undertaking as one which would reduce their own access to and benefit from Extension. There was general agreement that the program could be effective, but it was accompanied by a failure to sense that there would be personal gain from advances of the poor and minority populations. As pointed out earlier, community influentials and some academic heads saw work with such audiences as appropriate for welfare agencies but not for home economics Extension.

The introduction and continuation of Federal funding and specific operating guidelines made it possible to partially overcome these objections. Many who previously had negative views have become more accepting of the program and respectful of its accomplishments. There appears to be little commitment on their part, however, to redirect a significant portion of State and county funds or academic interest to its support. Some State legislatures have made it clear that they will not include EFNEP employees in their consideration of formulas for merit and inflationary salary adjustments. Commitment to equal employment opportunity has necessitated reduction of staff and generally weakened the power to achieve the program goals to the extent desired.

Essentially, two audience types must benefit from program efforts if public support is to be maintained, the extent of outreach is to be expanded, and the most serious social and economic needs are to be addressed. Those with intense economic need and very basic social needs (safety, security, and response) constitute the first group. Those with reduced economic need and social need for recognition and self-actualization comprise the second audience type.

Sound educational principles dictate that program should be directed to both individuals and the groups with which they tend to identify to achieve permanent benefit and continuity of program effort. (See figure 5 for content of program levels and targeted audiences.)

Figure 5.Primary Content Required for Individual and Group Instruction of Two Basic Audience Types Necessary to Effectively Achieve Social and Economic Change

		AUDIENCE TYPE	
		A. Intense Economic Need Basic Social Needs	B. Reduced Economic Need Advanced Social Needs
Program Level	Individual	Frequent and intensive instruction in small group or one-to-one settings to generate individual practice changes which have direct impact upon learner's home and family.	Orientation and in-service training to serve in outreach capacity. Opportunity to extend educational service on one-to-one or small group basis and reinforce applicable earlier learning. Opportunity to expand knowledge and skills which have direct benefit to home and family as reward for service.
	Group	Educational assistance to organize and develop neighborhood/community groups to undertake shared educational experiences and provide an arena in which successful individual practice change can be shared and reinforced. Identify and train indigenous leadership.	Stimulate sponsorship and direction to emerging groups in audience type A. Provide group recognition for public service rendered.

A major dangerto this approach is the creation of a "Lady Bountiful" mentality among the dominant cultural groups. This can be prevented through effective screening and training processes.

The primary weakness to organization of program within this framework is the inability to control quality and collect reliable impact data. Solution to this lies in generating skills and satisfaction among agents in performing less direct teaching and more educational management functions.

SUMMARY OF STRENGTHS AND WEAKNESSES

Extension professionals and others who have studied the Extension model as a possible vehicle for the conduct of programs in health and energy education consistently observe several major strengths. Table 13 outlines the generally agreed upon strengths and the major areas of improvement within each that appeared warranted from this review of the background and history of the home economics program.

Local Base for Program Delivery: The cooperative (Federal, State, county, and city governments) nature of the program origin and organization greatly reduces the purely political manipulation of the program while facilitating the implementation of family-oriented efforts of all levels of government. The involvement of potential and actual participants in the planning and conduct of programs heightens relevance and reduces resistance to "another government program."

To maximize these values, steps should be taken to improve the flow of information between the participating governmental units and among participants in the program determination process. Increased interaction between citizen advisory groups and university representatives should be facilitated to assure improved quality of program content. Effort is needed to obtain and maintain a functional balance between learner needs, the knowledge base, social and economic conditions, and government priorities.

The composition of citizen advisory groups serving the home economics program should be analyzed systematically and appropriate adjustments made in the process of identifying and recruiting representatives to assure meaningful involvement of all segments of the population to be served. A greater number of persons with interest in family-oriented programs is needed on the overall Extension planning committees currently dominated by agricultural commodity interests, if greater attention to social conditions is desired.

Direct Linkage to Respected Knowledge Base. While the linkage to the land-grant universities is intended and can serve as a means to assure transfer of scientific knowledge to the populace, the institutions are not fully committed to the conduct of the home economics Extension mission. There is institutional resistance to the level of accountability reporting necessary to satisfy funding sources, a dearth of institutional research funds in support to the home economics Extension needs, and no significant involvement of Extension personnel in the research fund allocation process. The lack of validated criteria for recruitment and recognition of Extension staff who are employed in the academic setting but must function in the community does not encourage the greatest program impact. The varying institutional organizational plans do not always facilitate linkage to units of the university which could contribute to development of staff skills in evaluative procedures. It appears that greater academic responsiveness to and accommodation of home economics Extension program needs should be required if improved quality of program delivery is expected.

Table 13. Observable Strengths and Areas Which Warrant Improvement in Home Economics Extension

Observable Strengths	Areas Which Warrant Improvement
A. Strong local base for program delivery.	A ₁ Balance of program determinants. A ₂ Composition of citizen advisory groups.
B. Direct linkage to respected knowledge base.	B ₁ Level of commitment of academic administration and faculty to Extension mission. B ₂ Relevant data collection and reporting system. B ₃ Expanded research base. B ₄ Evaluative skills of staff. B ₅ Criteria for employment of Extension staff.
C. Capacity to reach all socio-economic levels of society . accessible service centers (except in urban areas) . organizational framework . diversity of content and method	C ₁ Dispersion of audience and content focus. C ₂ Affirmative action compliance. C ₃ Sex-role stereo-typing in staffing and delegation of program authority and responsibility. C ₄ Funding formula.
D. Effective professional-volunteer relationship.	D ₁ Direction of Extension Homemaker Clubs D ₂ Development of supplemental volunteer groups.
E. Flexibility and short gear-up time to address emergency situations.	E ₁ Divestment of program responsibility. E ₂ Regional and national coordination of program activities. E ₃ Attitude toward earmarked funds.
F. Primary function is education rather than regulation, advocacy or service	F ₁ Balance between awareness building and education leading to practice adoption.

Capacity to Reach All Socio-Economic Levels of Society. This capacity lies in the organizational framework, but is only a potential capacity given the number of staff positions allocated to the home economics Extension program. The great number and dispersion of audience and content disallows intensive direct educational effort with more than a small percent of the populace. Current staffing, nationally, provides one man-year of professional staff for 18,000 households, or approximately 68,000 family members. This is offset to some degree in the conduct of food and nutrition education programs by paraprofessional staffing in the EFNEP.

Affirmative action standards are designed to encourage accessibility of programs for all persons, irrespective of selected demographic characteristics. Local norms are not always compatible with these standards, however, and often deter compliance. Home economics Extension is often criticized for failure to sufficiently serve the lower socio-economic strata. On the other hand, because of the massive program effort directed to EFNEP, the program is perceived sometimes to be insufficiently capable of reaching the middle and upper strata. Some resolution of these contradictory expectations is warranted if the organizational capacity is to be realized.

Within the total Extension organization, home economics personnel are not centrally involved in the allocation of resources. Responsibility for program outcome is not always coupled with authority over resources or performance. A greater consistency between responsibility and authority is needed if major adjustments of program capacity are desired.

The Federal funding formula is reflected in State appropriations and in distribution of funds within the States. The formula is irrelevant to the home economics program mission and need. Greater specificity of purpose for use of appropriations is warranted if address of the social and economic conditions impacting on families is intended.

Professional-Volunteer Relationship. While the development of leadership skills and maintaining constructive relationships with large numbers of volunteers is evident in the home economics Extension program, more attention to directing those volunteer activities is required to assure program quality. Greater attention to this dimension could also result in expanded outreach capability. Not all volunteer services should be expected to emanate from the Extension Homemakers Organization. Local church groups, garden clubs, civic and social organizations can provide service in selected areas of endeavor.

Flexibility and Short Gear-Up Time to Address Emergencies. Internal sanctions imposed for divestment of program which results in audience decline impedes the flexibility capabilities of Extension home economists. Duplication of material, production, and staff training activities dissipates resources which are needed to activate program plans and address unforeseen educational needs. A resistance to earmarked funds by those who dominate the distribution of resource allocations deters effective achievement of program objectives. Correction of these inhibitors is necessary to maximize program efficiency and effectiveness as well as generate staff creativity.

Education as Primary Function. There appears to be lack of clarity about the place of information dissemination in the educational mission. While dissemination of facts is a part of the educational process, it cannot be effective in producing practice change except among a very small percent of the population--insufficient to result in any noticeable social or economic impact. Information dissemination must be viewed as a means to stimulate awareness and efficiently facilitate the diffusion process which results from educationally-intensive efforts directed to targeted audiences.

APPENDIX

- EXHIBIT 1. "Assets and Liabilities of Selected Agencies for the Conduct of Health Education Programs."
- EXHIBIT 2. "Applicability of the Cooperative Extension Service to Energy Extension."

Exhibit 1

Chart 1. Assets and Liabilities of Selected Agencies for the Conduct of Health Education Programs.

	<u>Assets</u>	<u>Liabilities</u>
Official Health Agencies	<ol style="list-style-type: none"> 1. Legal authority in field 2. Broad knowledge of health problems 3. Ability to consider facts, make decisions, and organize effective action 4. Built-in base for coordination of variety 	<ol style="list-style-type: none"> 1. Political limitations 2. Frequent lack of flexibility 3. Fragmentation of service 4. Frequently viewed as service for indigents
Voluntary Health Agencies	<ol style="list-style-type: none"> 1. Knowledge of special subject matter 2. Local contacts 3. Speed of response 4. Capacity to influence decisionmakers in relation to special subject 5. Network of volunteers for policies and service 	<ol style="list-style-type: none"> 1. Uncertainties of funding 2. Narrow specialization
Cooperative Extension Service	<ol style="list-style-type: none"> 1. Capacity to reach all socioeconomic levels 2. Facilities for outreach, especially to rural people 3. Continuing local contacts and access to total family 4. Professional-volunteer relationships 5. Primary function or education 6. Access to university resources ability to bring them to local level 	<ol style="list-style-type: none"> 1. Lack of medical knowledge base 2. Lack of staff trained in health 3. Tradition of heavy involvement in nonhealth educational work
Medical Schools	<ol style="list-style-type: none"> 1. Technical knowledge 2. Well-trained manpower 	<ol style="list-style-type: none"> 1. Lack of local contacts 2. Frequent lack of ability to work with local community
Churches and Civic Groups	<ol style="list-style-type: none"> 1. Flexibility 2. Capacity for fund-raising 	<ol style="list-style-type: none"> 1. Lack of knowledge of health 2. Lack of staff trained in health

SOURCE: Helen L. Johnston and Charles O. Crawford, "Potentials for Interstate, Interagency Cooperations" in Cooperative Health Education, a special Spring 1975 issue of Health Education Monographs.

5.0 Applicability of Cooperative Extension Service to Energy Extension

5.1 Strengths of Cooperative Extension Service

As a result of personal interviews held by the author of this paper, with USDA Extension policymakers in Washington; State and county staffs in Ohio, North Carolina, Indiana, and Maryland; and a reading of relevant literature, a synthesis of the key strengths of Extension is described in the following subsections. The strengths section agrees fundamentally with the report of the USDA - National State Universities and Land-Grant Colleges study committee findings.

- 5.1.1 Interactions at the three levels of government do operate as a system with feedback and cross communication, in a productive cooperative manner.
- 5.1.2 The "bottom up" approach responds quickly and effectively to needs at the grassroots level.
- 5.1.3 The system is flexible and diversified in program design and implementation and can function differently in each State and county as appropriate.
- 5.1.4 County agents are dedicated people who are a part of the community they serve.
- 5.1.5 The source of research knowledge (the land-grant university) is a part of the system itself; there is a high level of objectivity.
- 5.1.6 Over its 63-year history, the relationship with its audience has matured to be a local tradition in many rural communities.
- 5.1.7 Both the audiences and the agents are highly motivated individuals. There is a high degree of empathy at the county level.
- 5.1.8 The response time to new or emergency problems is rapid, more so than possible in a bureaucratic environment.

5.2 Problems and Disadvantages of Cooperative Extension Service

- 5.2.1 In contemplating the application of the Extension model to energy conservation education, planners should keep in mind some of the limitations of Extension. One of the most apparent difficulties in Extension is the lack of an accurate reporting system from which the evaluation of the cost effectiveness of the program

5.2 Problems and Disadvantages of Cooperative Extension Service (continued)

5.2.1 can be accomplished. Because of the independence and autonomy of county agents from the State university, and the loose partnership between the States and the Federal Extension bureaucracy, it has been difficult to require extensive reporting of local level activities. The county agent is loyal to his or her community leaders and to the county perception of performance, and sometimes reluctant to coordinate with other parts of the system. Effectiveness of Extension has been reported in terms of number of contacts made rather than in any quantification of results. The lack of "top down" management is both an advantage and a limitation - an advantage in providing motivation and freedom of activity, a limitation in enforcing accurate feedback of program results for management control purposes. Likewise, successful programs are not easily transferred from one State to another except by means of an unofficial "grapevine" effect. Extension may be more useful, therefore, in serving State and local goals as opposed to national ones.

On the other hand, the effects of energy conservation are more easily measured and quantified, and national goals for energy conservation should be consistent for the most part with local economic goals.

5.2.2 Much of the success of individual county Extension programs hinges on the personality of the county agent and his or her rapport with local officials and the State university.

5.2.3 The structure of Extension continues to emphasize contact with rural rather than urban recipients. In the case of energy conservation, there is a need to reach all sectors of society.

5.2.4 While the land-grant university and its associated agricultural college is a natural institution for agricultural Extension, the research base at other universities, engineering schools, and State laboratories throughout a given State would also support the transfer of energy conservation technology by an effective Energy Extension Service.

5.2 Problems and Disadvantages of Cooperative Extension Service (continued)

- 5.2.5 Tradition of Extension until quite recently has found men serving agriculture and community resource specialities and women serving in home economics and 4-H roles. Energy conservation requires education of both men and women equally. A balanced approach will be necessary.
- 5.2.6 Programs such as EFNEP have served social welfare as well as Extension educational goals. This presents difficult problems in equity in balancing the needs of all segments of society. Energy conservation must be practiced by the poor and wealthy alike, so that educational programs need to be directed to all people. The Federal weatherization program is an example from the energy field in which both social and energy goals are simultaneously served.

SOURCE: "The Cooperative Extension Service of the United States Department of Agriculture, A Model For Energy Education" The Energy Center, 715 8th Street, S.E., Washington, DC 20003

NOTES

1. Currently known as the National Extension Homemakers Council.
2. A revision of the purpose changed the last line to read: ". . . Extension projects of national and international importance in the protection and development of the American home."
3. Project leaders are volunteers from any formally organized group who attend a training meeting conducted by an Extension home economist with the understanding that they will teach the lesson to their respective groups. Usually clubs appoint two project leaders for each lesson.
4. Funding based on rural population and extent of agricultural land is unrelated to the population to be served by home economics Extension.

The high percent of budget committed to salaries and wages does not facilitate major redirection of program emphasis within the total Extension program.

5. According to the U. S. Census, at this same time, 12 percent of all families lived on farms and ranches, and 23 percent were rural nonfarm.

BIBLIOGRAPHY

- A People and A Spirit.* Extension Service, USDA and National Association of Land-Grant Colleges and Universities, 1969.
- Baroff, James H., *The Cooperative Extension Service of the USDA: A Model for Energy Education.* The Energy Center, Washington, D. C., 1977.
- Bennett, Claude F, *Analyzing Impacts of Extension Programs.* Extension Service, USDA, 1976.
- Berry, Wendell, *The Unsettling of America Culture and Agriculture.* Avon, New York, 1978.
- Bliss, Ralph K, *Extension in Iowa--The First Fifty Years.* Iowa State University, Ames, Iowa, 1960.
- Bradish, Damaris, *A Binary Theory of Program Development.* Unpublished paper, 1968.
- Bradish, Damaris, "Are We Short Changing Our Families in Our Audience? *The Candle.* Phi Upsilon Omicron, 1975.
- Bradish, Damaris, *Indigenous Paraprofessionals in Developing Societies,* Unpublished paper, 1967.
- Brower, Stephen L., "Dilemma of Adult Educators," *Journal of Extension,* September, 1964.
- Bryant, Charles J., *Home Demonstration Club Members.* Georgia Agricultural Extension Service, 1957.
- Burns, Scott, *The Household Economy.* Beacon Press, Boston, 1975.
- Clairborne, Robert, "A Penny of Prevention: The Cure for America's Health-Care System," *Saturday Review,* January 6, 1979.
- Craig, Hazel T., *The History of Home Economics.* Practical Home Economics, New York, 1945.
- Directing the Cooperative Extension Service,* Robert C. Clark and N. P. Ralston, editors. National Agricultural Extension Center for Advanced Study, University of Wisconsin, 1962.
- "Do Extension Participants Differ from Non-Participants?" Unpublished data from Farm and Home Development Study, Rural Sociology Department, University of Wisconsin, 1964.
- Education for Action.* National Extension Homemakers Council, 1966.

- Energy Conservation Analysis Program.* University of Massachusetts, August, 1978.
- Extension Impacts.* Extension Service, USDA, May, 1977.
- Families In the Expanded Food and Nutrition Education Program: Comparison of Food Stamp and Food Distribution Program Participants and Non-Participants.* Economic Research Service, USDA, 1969.
- Fessenden, J. G. *National Study of Homemakers Enrolled in Home Demonstration Clubs and Groups.* Federal Extension Service, USDA, 1957.
- Finance Facts Year Book.* National Consumer Finance Association, 1970.
- FOCUS II Home Economics Extension.* Extension Service, USDA and National Association of Land-Grant Colleges and Universities, 1974.
- Frysinger, Grace E., "Home Demonstration Work Comes of Age," *The Country Gentlemen*, March, 1935.
- Gallup, Gladys, *Evaluating Home Economics Extension Work.* Federal Extension Service, USDA, 1952.
- Gallup, Gladys, *Next Step.* Federal Extension Service, USDA, 1948.
- Gilbert, Claire Erin, *The Development of Selected Aspects of Home Demonstration Work in the United States.* Unpublished Master's Thesis, Cornell University, Ithaca, New York, 1958.
- Health Education in the Cooperative Extension Service: Present Status and Recommendations for Future Action.* Public Health Service, U.S. Department of Health, Education, and Welfare, March, 1978.
- "Here to Stay: American Families in the Twentieth Century," *Carnegie Quarterly.* Carnegie Corporation of New York, Vol. XXIV, No. 4, Fall, 1976.
- Heritage Horizons,* C. Austin Vines and Marvin A. Anderson, editors. *Journal of Extension*, Madison, Wisconsin, 1976.
- Heywood, Eunice, "What Will Tomorrow's Homemaker Expect of Extension?," *Changing Dimensions in Agriculture and Home Economics: Impact on Cooperative Extension Administration.* National Agricultural Extension Center for Advanced Study, University of Wisconsin, Publication No. 13, June, 1962.
- Hill, Kate Adele, *Home Demonstration Work in Texas.* The Naylor Co., San Antonio, Texas, 1958.
- History of Cooperative Extension Work in Agriculture and Home Economics.* Ohio Cooperative Extension Service.

- Home Economics Extension FOCUS.* Extension Service, USDA and American Association of Land-Grant Colleges and Universities, November, 1966.
- Illustrations of Cooperation in Home Economics Programs.* Federal Security Office, U.S. Office of Education, 1939.
- Lund, Lois A., "The Future of the Family," *Journal of Home Economics*, September, 1976.
- Kelsey, Lincoln David and Cannon Chiles Hearne, *Cooperative Extension Work.* Comstock Publishing Associates, Ithaca, New York, 1963.
- Mann, Opal, *Influences of the Kentucky Cooperative Extension Home Economics Program.* University of Kentucky, 1965.
- Martin, O. B., *The Demonstration Work.* The Naylor Co., San Antonio, Texas, 1941.
- McKeown, Thomas, "Determinants of Health," *Human Nature*, Vol. 1, No. 4, April, 1978.
- Merchant, Marjorie M., Susan L. Wells, and Carol B. Meeks, *Consumer Education in the Economically Integrated Housing Community.* Division of Home Economics, College of Food and Natural Resources, University of Massachusetts, Amherst, Massachusetts, 1975.
- New Directions II,* American Home Economics Association, Washington, D.C., 1975.
- Newkirk, Gwendolyn A., "Women in the Future," *Journal of Home Economics*, American Home Economics Association, September, 1976.
- Parsons, Gerald E., *Homemaker Participation in an Extension Program*, Unpublished Master's Thesis, Iowa State University, Ames, Iowa, 1959.
- Post War Agricultural Policy.* Association of Land-Grant Colleges and Universities, 1944.
- Proceedings of the National Symposium on Home Demonstration Work.* Federal Extension Service, USDA, and National Agricultural Extension Center for Advanced Study, University of Wisconsin, 1958.
- Report of Federal Extension Specialists' Workshop.* Extension Service, USDA, Circular No. 444, 1974.
- Report of the Scope Task Force on Family Living.* National Association of Land-Grant Colleges and Universities, 1958.
- Special Report on Extension Energy Programs.* Extension Service, USDA, 1977.

Statistical Abstract of the United States. U. S. Government Printing Office, Washington, D. C., 1972.

Study of North Carolina Negro Homemakers. North Carolina Agricultural Extension Service, September 1964.

Teaching Families to Live with Change. Extension Service, USDA, 1977.

Teaching Learning Activities of Kansas Cooperative Extension Service. Kansas City University, 1977.

True, Alfred C., *A History of Agricultural Extension Work in the United States, 1785-1923.* USDA Miscellaneous Publication No. 15, U.S. Printing Office, Washington, D. C., 1928.

Verma, Satish; Joseph Smilie; Betty Wood; Bobbie McFatter, *An Evaluation of the Residential Energy Conservation Education Program.* Louisiana Cooperative Extension Service, LSU, December, 1978.

Water, Gladys L., *Development of Home Economics Extension.* Federal Extension Service, USDA, 1925.

You Can Do It: Report of a Cooperative Housing and Management Extension Educational Program With Limited to Moderate Income Single Unit Homeowners. Texas Agricultural Extension Service, College Station, Texas, 1974.

II.

THE GALLUP POLL FINDINGS

To assess client participation in Extension home economics, The Gallup Organization was commissioned to conduct a poll of adults in the United States. A total of 1,514 persons were interviewed about the extent of their contact with home economics Extension. Cross-checks with census data for the total population indicate that the sample polled provided accurate estimates of population characteristics such as sex, race and age, increasing confidence that a representative sample was obtained.

About 11 percent of persons 18 and over polled indicated that they had participated in Extension activities with the most common form of participation being attendance at a meeting or special event. About 2.4 percent had participated as a member of a home demonstration club or a homemakers club. A comparable percentage indicated involvement through 4-H youth home economics programs, and 1.5 percent indicated they had participated in the Expanded Food and Nutrition Program. The totals for all forms of participation came to 12.5 percent because about 1.5 percent of the population had participated in more than one activity.

In addition to the 11 percent who have participated in some activity, another 34.4 percent had heard of Extension home economics. Moreover, when asked about information provided by home economists, about 51 percent of the sample indicated having received some form of information although 17 percent could not identify the source. Therefore, over one-third of the adults had heard of home economics or received information from an identifiable source, and over one-tenth had participated in some fashion. Combined with census projections of the number of adults in 1978, these percentages translate into approximately 17 million participants and 52 million Americans who had heard of or received Extension home economics information. Since no time period was specified for each of the questions, these figures do not allow computation of an annual number of participants. However, most people probably responded with a fairly limited time frame in mind. They do show that the cumulative total of people reached or involved is large.

QUESTIONS ASKED

1. Which of the ways shown on this card, if any, describes your participation in the Cooperative or Agricultural Extension Service through the home economist or home demonstration agent?

Respondents were shown a card listing the following:

- . At a meeting or special event on food and nutrition, clothing, money management and consumer information, child development, housing and energy conservation, or others;
 - . As a member of an Extension Home Demonstration Club or Homemakers Group;
 - . In the Expanded Food and Nutrition Education Program (EFNEP or ENEP);
 - . In a 4-H youth home economics program; or
 - . Others.
2. In which of the ways listed on this card does your county Agricultural Extension Agent's office, or home economist or home demonstration agent, supply you or your family information regarding home economics or food and nutrition?

Respondents were shown a card listing the following:

- . Radio;
 - . TV;
 - . Newsletters;
 - . Newspaper articles;
 - . Telephone;
 - . Publications, bulletins;
 - . Special interest meetings;
 - . Home visits; or
 - . Others.
3. On which subjects listed on this card have you received information from the Extension home economist or the home demonstration agent?

Respondents were shown a card listing the following:

- . Food preservation and preparation;
- . Money management or consumer affairs;
- . Crafts and recreation;
- . Nutrition;
- . Family problems and child development;
- . Clothing;
- . Housing;
- . Energy conservation; or
- . Others.

4. How useful was the information you or your family received from the Extension home economist or home demonstration agent? Would you say very useful, fairly useful, not too useful, or not at all useful?

INFORMATION: SOURCE, TOPIC, AND UTILITY

The Smith-Lever Act of 1914 not only established the Cooperative Extension Service, but specified that such service should consist of "instruction and practical demonstration." Instruction and demonstration were envisaged to involve direct, personal contact, active participation, and diffusion of results through further activity by participants. While this form of education remains the ideal, other means of disseminating information may actually reach a greater proportion of the public. When those who had received information identified it as provided by an Extension agent, the most commonly cited source was the newspaper. Fifteen percent of the sample indicated receiving information through newspaper articles, 14 percent through television, 13 percent through radio, 11 percent through publications, and 9 percent through newsletters. Five percent had received information on the telephone, 6 percent in special meetings, and about 2 percent from home visits. These add up to more than 34 percent receiving information from an identifiable source because many respondents reported receiving information from several sources.

The distribution of professional staff time by subject matter in home economics Extension has shifted over the years, reflecting the development of problems impinging on home and family. While in 1925, over 90 percent of professional time was spent on nutrition (50 percent) and textiles and clothing (32 percent), by 1977 "family economics" (including energy conservation) and nutrition were the subjects for about 35 percent of professional time, each followed by child development (16 percent), textiles and clothing (10 percent) and health, safety, and sanitation (4 percent). The Gallup Poll data are consistent with the current distribution of effort in that the most common subject of information received was identified as food preservation. The second most common was general nutrition (22.3 percent) followed by energy conservation (22.1 percent), crafts and recreation (10.9 percent) and money management or consumer affairs (10.1 percent). Family problems and child development, clothing, and housing were each identified as the subject by between 8 and 9 percent of the respondents.

Of those who indicate receiving information, about 42 percent found it to be "fairly" or "very useful." Ten percent found it to be "not too useful" or "not at all useful," and the remaining 48 percent did not know the source or topic of the information. When those who could identify topics are considered, the proportion finding the information fairly or very useful is much greater:

	<u>Very/Fairly Useful</u>
Food preservation	90.4 percent
Money management or consumer affairs	87.6 percent

Very/Fairly Useful

Crafts or recreation	94.0 percent
Nutrition	86.8 percent
Family and child development	83.0 percent
Clothing	93.9 percent
Housing	86.4 percent
Energy conservation	82.0 percent
Other	79.7 percent
Don't know	2.0 percent (93.0 percent "don't know")

Overall, for respondents who could identify a topic, an average of 87.5 percent found the information useful.

Based on July 1, 1978, census estimates, we can project (with a 10 to 14 percent range allowing for sampling error) that 12 percent or 18.5 million adults received information they deemed "very useful," and 9 percent or 14.5 million adults received information which the respondents termed "fairly useful." It can be roughly estimated that 33 million adults received useful information from Extension.

One-half (50 percent) of those who received information from Extension could not remember the subject of the information received. Perhaps this is because of lack of a specified time period (in the Gallup survey) during which information might have been disseminated; those who did not know the subject of the information received were apt to be nonwhite (60 percent) versus white (49 percent), have less education (college = 38 percent, high school = 53 percent, grade school = 77 percent), and live in larger cities (e.g., cities of 1 million + population = 65 percent, small town of less than 2,500 population = 39 percent).

Gallup found no "statistically significant differences" among media studied (radio, television, and newspapers) in regard to the perceived usefulness of information. Given the tables presented by Gallup, such tests for statistical significance are invalid because of the possibility of multiple responses (e.g., the chance that the same person responded two or more times to a single item). However, newspapers were given higher ratings in comparison with television in terms of usefulness of information. A detailed breakdown follows:

	<u>Very useful/ Fairly useful</u>	<u>Not too useful/ Not at all useful</u>
Newspapers	70 percent	8 percent
Radio	66 percent	11 percent
Television	56 percent	16 percent

VARIATIONS AMONG GROUPS

PARTICIPATION

While 11 percent of the total population has participated in some form of home economics Extension activity, there were some statistically significant differences in participation among different groups:

- (1) Women (15 percent) participated more than men (9 percent).
- (2) The greater the education, the greater the participation (college = 14 percent, high school = 10 percent, grade school = 7 percent).
- (3) The greater the income, the greater the participation (e.g., \$20,000+ = 14 percent, less than \$10,000 = 7 percent)
- (4) People living in the West (14 percent) and South (12 percent) participate more than people in the Midwest (10 percent) or East (8 percent).
- (5) The smaller the city, the greater the participation (e.g., one million population and above = 6 percent, less than 2,500 = 17 percent)
- (6) Whites (11 percent) participate more than non-whites (6 percent).
- (7) Farmers (35 percent) participate more than non-farmers (10 percent).
- (8) Excluding farmers, the higher the occupational status, the greater the participation (e.g., professionals = 13 percent, manual = 9 percent).

Background characteristics which were not significantly related to participation included (1) size of household, (2) number of adults in the household, and (3) age of adult respondents.

AWARENESS

The following were found to be statistically significant differences in "awareness" of Extension services by various groups. "Awareness" of Extension services was defined as participation in an Extension program, or having heard of but never participated in such programs:

- (1) Whites (56 percent) are more aware of Extension than nonwhite (37 percent).

- (2) Older adults (50 and over = 58 percent, 25-49 year olds = 56 percent) tend to be more aware of Extension than younger adults (18-24 year olds = 43 percent).
- (3) Farmers (85 percent), professionals (61 percent), and nonlaborers (60 percent) were more aware of Extension than manual (46 percent) and clerical/sales (49 percent) persons.
- (4) People with higher incomes (e.g., \$20,000+ = 63 percent) were more aware of Extension than persons with low incomes (people less than \$10,000 = 42 percent).
- (5) The more one's education, the greater the awareness of Extension (college = 62 percent, high school = 53 percent, grade school = 40 percent).
- (6) Those living in the South (67 percent) were more aware of Extension than those living in other regions (e.g., West = 48 percent, Mid-West = 41 percent).
- (7) People living in smaller towns (e.g., less than 2,500 population = 78 percent, 2,500-49,999 = 68 percent) tend to be much more aware of Extension than do people residing in larger cities (e.g., 500,000-999,999 = 36 percent, 1 million+ = 27 percent).

Variables which were not significantly related to awareness of Extension programs include (1) sex of the respondent and (2) household size.

SOURCES AND SUBJECTS OF INFORMATION

There were differences among groups in the source of their information, with written information (newspapers, publications, newsletters) identified as a source more often by (1) whites than nonwhites, (2) farmers than other occupational groups, (3) persons of higher than lower income, and (4) persons in small cities than persons in large cities. More detailed breakdowns are:

- . Whites are more likely than nonwhites to get information from newspapers (16 percent versus 7 percent).
- . Whites are more likely than nonwhites to get information from newsletters (9.7 percent versus 4.8 percent).
- . Whites are more likely than nonwhites to get information from publications (12 percent versus 5 percent).

- . Whites are more likely than nonwhites to get information from radio (14 percent versus 5 percent).
- . Those with incomes of \$20,000 and higher were more likely (20 percent) to get information from newspapers than those with incomes less than \$10,000 (10 percent).
- . Those with higher incomes were also more likely to get information from publications (16 percent versus 5 percent for the same two income groups).
- . People with smaller incomes were less likely to get information from newsletters (5.3 percent for those less than \$10,000 versus 11 percent for those \$20,000+).
- . College educated persons were more likely to get information than those with a grade school education by means of newspapers (16 percent versus 7 percent).
- . College educated persons were more likely to get information than those with a grade school education by means of television (16 percent versus 7 percent).
- . College educated persons were more likely to get information than those with a grade school education by means of radio (17 percent versus 4 percent).
- . College educated persons were more likely to get information than those with a grade school education by means of publications (16 percent versus 5 percent).
- . College educated persons were more likely to get information than those with a grade school education by means of newsletters (11.7 percent versus 5.3 percent); 66 percent of those with a grade school education reported receiving no information, compared with 44 percent of the college educated.
- . People residing in communities with population of 1 million and higher were less likely to receive information than those residing in small towns less than 2,500 in population by means of newspapers (5 percent versus 24 percent).

- . People residing in communities with populations of 1 million and higher were less likely to receive information than those residing in small towns less than 2,500 in population by means of radio (4 percent versus 20 percent).
- . People residing in communities with populations of 1 million and higher were less likely to receive information than those residing in small towns less than 2,500 in population by means of publications (5 percent versus 19 percent).
- . People residing in communities with populations of 1 million and higher were less likely to receive information than those residing in small towns less than 2,500 in population by means of newsletters (5.5 percent versus 17.3 percent); small towns under 2,500 in population were less likely to report that they had received no information in comparison with large cities (38 percent versus 65 percent).
- . Larger households were more likely to get information from newspapers than small households (e.g., 18 percent for households with four or more, 9 percent for single person households).
- . Farmers (36.7 percent) were more likely to have received information by way of newsletters than any other occupational group (e.g., manual laborers = 7.7 percent); farmers were also more likely to have received information by means of newspapers than any other occupational group (e.g., professionals = 17.4 percent).
- . Of those receiving information on food preservation, a higher percentage tended to be women (36 percent) versus men (23 percent), farmers (54 percent) versus other occupational groups (e.g., professionals = 35 percent, nonlaborers = 29 percent), higher in education attainment (college = 42 percent, high school = 25 percent, grade school = 16 percent), and live-in communities with a population less than 2,500 (43 percent) rather than in large cities with populations 1 million+ (14 percent).
- . Of those receiving information on nutrition, a higher percentage tended to be college (29 percent) and high school (21 percent) educated versus grade school (9 percent) educated.

- . Of those receiving information on energy conservation, a higher percentage tended to be farmers (51 percent) versus other occupations (e.g., clerical and sales workers = 21 percent), have higher incomes (e.g., \$20,000+ = 29 percent, less than \$10,000 = 9 percent), and to be college (28 percent) or high school (22 percent) educated versus grade school educated (3 percent).

UTILITY

Several statistically significant differences were found among different groups in terms of how "useful" they viewed the information received from Extension. People who were likely to perceive the information as "very" or "fairly useful" are probably:

- (1) 43 percent female and 37 percent male.
- (2) 43 percent white and 39 percent nonwhite.
- (3) 77 percent farmers versus other occupational groups (e.g., professionals = 46 percent, manual laborers = 37 percent).
- (4) 52 percent college or high school (40 percent) educated, rather than only grade school (23 percent) educated.
- (5) Living in South (46 percent) instead of other regions (e.g., Midwest = 38 percent).
- (6) Residents of smaller towns (e.g., towns with populations less than 2,500 = 56 percent) rather than of large cities (e.g., cities 1 million+ = 29 percent).

Variables for which no clear pattern of differences emerged included (1) household size, (2) age of respondent, and (3) income level.

SUMMARY

Extension programs have involved a significant number of American family members, and Extension information has reached an even greater number. While people of both sexes, from all racial categories, occupations, and settings are involved in or reached by Extension education programs, there are significant differences among categories of Americans. Some patterns reflect the distribution of Extension efforts, such as the greatest involvement is found in the West, South, or Midwest as compared to the Northeast; in small towns and cities as opposed to large cities; and among farmers compared to any other occupation. Males and females differ in terms of active participation, subjects of information received, and utility of information. Minorities, people with low income, the least educated, and people in large cities are less likely to have been reached than whites and Americans with higher incomes and educational levels. These minorities, low income, the least educated, and people in large cities are especially unlikely to be reached with written materials. Those who are reached in these categories are less likely to be able to identify the source or topic of the information and, are less likely to find the information useful.

III.

FRAMEWORK FOR ASSESSING THE SOCIAL AND ECONOMIC CONSEQUENCES OF EXTENSION HOME ECONOMICS AND NUTRITION PROGRAM

BACKGROUND

The focus of evaluation and reporting of program accomplishments has shifted over the years in Extension home economics and nutrition programs. The first era during the 1920's and 1930's consisted primarily of practice adoption studies by State and Federal specialists. The second era from the 1930's through the 1950's focused on county agents' reported estimates of numbers of individuals "reached."

The third era, which began in the 1960's, has continued to emphasize the reporting of input, activities, and people involvement data, largely through the Extension Management Information System. More recently, narrative reports of accomplishments have focused on people's reaction and some learning or practice change data.

During this third era, individual or State evaluation projects examined Extension results in terms of the attainment of teaching objectives, with most studies looking at specific program efforts. Although this approach has been useful in helping staff improve programs, it has not resulted in aggregate data at the State or national level, useful for assessing the social and economic consequences of Extension programs.

There is also another problem -- the flexibility and diversity of objectives apparent in the home economics program are a strength in serving educational needs of families and communities in more than 3,000 different locations. However, they are a liability when trying to develop concise national summaries of major results of investments in Extension programs.

THE CONGRESSIONAL MANDATE

The charge of assessing the social and economic consequences of Extension home economics programs, although not readily feasible with existing reporting capabilities, came at a time in home economics Extension's history when significant work was already underway to conceptualize and measure program results. The term "program results," of course, does not mean the same thing as "social and economic consequences," although both terms refer to the output side of Extension's efforts.

Since Extension has a variety of programs, delivered by different methodologies to varied target audiences, it is necessary to group the results or consequences under headings (called social indicators) which represent particular program thrusts. Program results are first measured individually before being added together to provide an aggregated, meaningful consequence statistic.

ROLE OF INDICATORS

Social indicators can be defined as: "...selected statistics or statistical measures which describe the general status of the population with respect to certain aspects of each concern."¹ Indicators thus provide a way of measuring program results, which can be aggregated to determine consequences of selected Extension program thrusts.

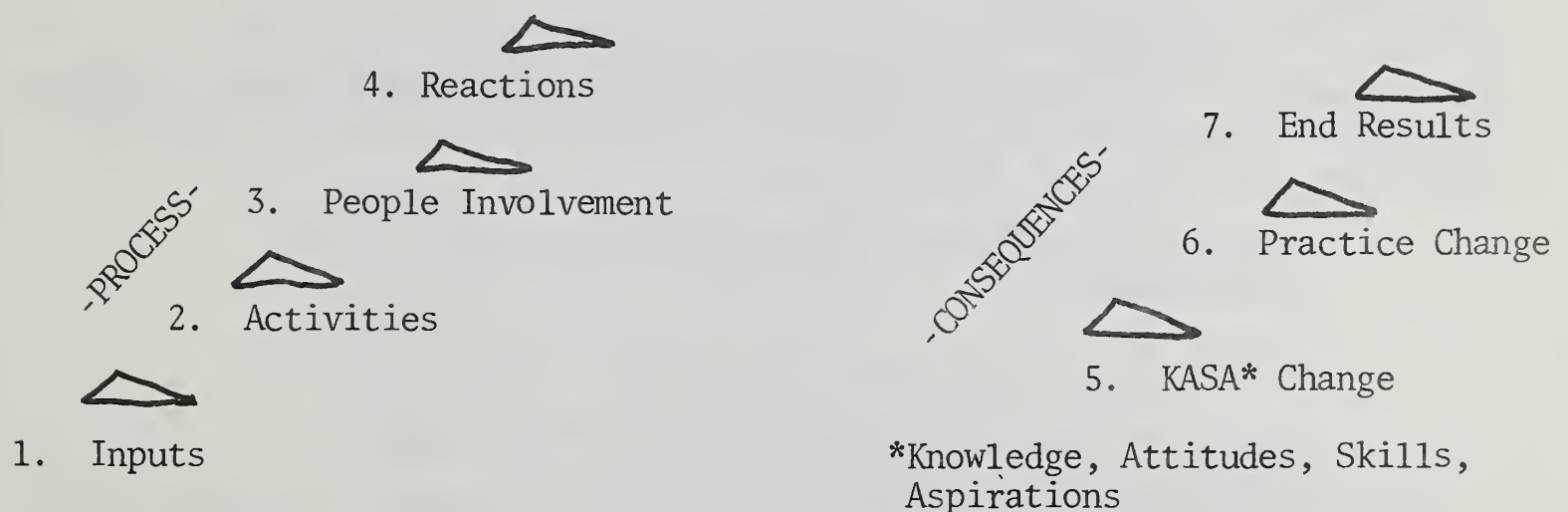
The development of such indicators, and the difficulties involved in their providing representative statistical summary measures, are discussed in the introduction to the Social Indicators, 1976 report. The evaluation team is aware that descriptive statistics frequently do not adequately illustrate complex social interactions, and that these indicators can never be completely representative nor even completely accurate. "But, if statistical data do not tell the whole story, they do provide much of the factual 'warp and woof.'"²

The 1975 project "To Identify Approaches to Evaluation and Accountability in Extension Home Economics"³ was a major effort to conceptualize indicators of program results for home economics evaluation and accountability purposes. Now most State leaders of home economics are working with specialists and agents to develop means of securing result information both in terms of larger consequences of programs, and in terms of results that are additive from county to county and State to State.

EXTENSION EVALUATION FRAMEWORK

The Bennett model helped Extension personnel clearly distinguish among seven types of information which need to be considered in program evaluation.⁴

Figure 6. CHAIN OF EVENTS IN EXTENSION PROGRAMS



Since most States use or are familiar with the Bennett model, it was adapted to link home economics and nutrition program events to potential program consequences.

DEVELOPMENT OF CONSEQUENCE FRAMEWORK

Using the Bennett "Chain of Events" as a reference, educational (KASA) and practice change can be considered the most immediate consequences of Extension contact. Acquisition of knowledge itself is viewed by some as a social consequence. If individuals apply new information or skills and make changes in daily practice, various end results become evident. It is at this level 7, that the greatest challenge is presented in terms of conceptualizing, documenting, and aggregating program results. Social indicators are therefore needed to represent what happens to individuals, families, communities and society as a result of interacting with Extension.

While Extension programs and their objectives vary considerably across the United States, program thrusts present a degree of similarity. For example, professionals address common problems such as nutrition, inflation, family relationships. To identify social and economic consequences that would reflect primary thrusts of typical Extension home economics and nutrition programs, a group of 20 academic professionals from universities across the country were requested to review the theoretical and research literature of their respective disciplines. They identified hypothesized linkages between typical program results and potential effects of consequences for individuals, families, and society (Andrews et. al.).⁵

The results of this work (summarized in appendix A) are the bases for identification of the categories of consequences.

INTEGRATION OF CONSEQUENCES

For purposes of this report, the broad scope of programming efforts in home economics and nutrition was classified for indicator development purposes into three categories of consequences:

- . Effect on consumption, production, and saving in the home (economic).
- . Effect on health through food and nutrition (physical).
- . Effect on capacity and functioning of individuals in families, jobs, and communities (social).

Home economics itself is an integrated body of knowledge, combining scientific and practical information in real-life situations. Subject matter from a variety of basic disciplines--psychology, physiology, microbiology, etc.--is synthesized to meet the needs of everyday family decisionmaking. Extension

home economists know that when someone has a problem, information from no single subject matter component usually covers it. Programs, therefore, address a variety of issues, using information from many sources to help families deal with complex decisions and forces affecting their lives. The consequences presented in this report, reflect the integrative nature of home economics program efforts, e.g., specific consequences are associated with outcomes from more than one program effort.

Within each category of consequences, selected indicators of educational changes, practice changes and end results have been indentified (See appendix B). These do not represent all possible home economics Extension impacts, but they are indicative of a range of impacts.

FRAMEWORK FOR IDENTIFYING SOCIAL AND ECONOMIC CONSEQUENCES OF HOME ECONOMICS/NUTRITION PROGRAMS

The framework presented in chart form at the end of this section deals with three levels of program results or consequences: educational change, practice change, and end results.

EDUCATIONAL CHANGE

The most immediate likely consequence of involvement with Extension is change in clientele. Most program objectives focus on change in:

- (K) Knowledge - awareness, acquisition of facts or specific information, comprehension, or understanding.
- (A) Attitudes - values of preferences, mental outlook or satisfaction, disposition or openness toward ideas, events, or situations.
- (S) Skills - ability to perform specific tasks, proficiency in dealing with a problem or situation, level of performance when applying specific ideas or practices.
- (A) Aspirations - motivation or personal commitments, desires, or expectations.

These educational changes are in and of themselves important consequences of Extension programs, changing the lives and potential functioning of individuals. In addition, since home economics Extension and nutrition education programs focus on providing relevant, timely information that stresses practical, individualized application of new knowledge or skills, learning can produce action or practice change.

PRACTICE CHANGE

When specific educational changes are applied, actions result such as (1) the adoption of a new practice, (2) the improvement of a present practice, or (3) the continuation of a recommended practice. These behavioral or practice changes are consequences that lead to new levels of functioning or status of individuals or families.

SOCIAL AND ECONOMIC IMPACT (END RESULTS)

Direct End Results. When individuals act, their actions have effects on people and things around them. These effects or results of changed behavior may be in the realm of economic consequences (e.g., dollars saved) social or psychological consequences (e.g., improved family communication) or political consequences (e.g., increased participation in public affairs) but they are direct impacts to the program participants and those close to them.

Diffused End Results. When individuals or families change behaviors, there are more diffused, but equally important effects for other individuals, other families, agencies and institutions in communities, or for society as a whole. These more generalized and aggregated effects also are end results, but they require considerable investigative effort and grow increasingly diffused when trying to determine cause and effect associations. For example:

- | | |
|---------------------------|--|
| (Educational Change) | -- Parent learns a new technique on how to communicate more effectively and democratically with teens. |
| (Practice Change) | -- Parent practices technique with young teenager. |
| (End Results for Family) | -- Parent/teen relationships improve. Generational conflict reduced. Family members enjoy doing more things together. |
| (End Results for Society) | -- When 200 families do the same thing, the demand for juvenile counseling service is decreased, school truancy and delinquency are decreased. |

Consequences at the "Diffused End Results" level are listed in italics in the framework, but will not be measured. Hopefully, more research can be encouraged in the future to document these longer term and more diffused effects.

Figure 7. FRAMEWORK FOR IDENTIFYING HOME ECONOMICS/NUTRITION PROGRAM CONSEQUENCES

INFORMATION TRANSFERS/ EDUCATIONAL CHANGES	APPLICATION AND CHANGE	CUMULATIVE EFFECTS
Level 5 KASA Change #	Level 6 Practice Change	Level 7 End Results
Individual/family educational change # (Documented change in knowledge, attitudes, skills, aspirations)	Individual/family behavioral change (Documented USE of knowledge in changing behavior)	Individual, family, community, societal impacts (Documented or theoretical results of change in behavior)

PROGRAM GOAL: Improved Health Through the Consumption of More Nutritionally Adequate Diets

INDICATORS OF EDUCATIONAL CHANGE ¹	INDICATORS OF PRACTICE CHANGE ²	INDICATORS OF SOCIAL ³ ECONOMIC IMPACT (END RESULTS)
Change in Knowledge of basic nutritional requirements for health Change in ability to identify foods high in saturated fat Change in concern for controlling weight	Change in nutritional adequate of diets Change in saturated fat intake Weight change	Change in vitality and involvement in social relationships, work and leisure activities Change in use and cost of health treatment services Change in ability, efficiency and absenteeism of work force Change in demand for and cost of health treatment

¹EDUCATIONAL CHANGE - The building of awareness and the acquisition of knowledge, skills, attitudes and aspirations as a result of contact with or participation in Extension home economics or nutrition educational activities.

²PRACTICE CHANGE - The application of knowledge, skills, attitudes and aspirations by individuals and families, producing changes in behavioral practices or functioning.

³END RESULTS - Corresponding social and economic effects for families, communities and/or society as a result of change in behavior and functioning of individuals and families; e.g., changes in style of life, use of resources, level of income, availability of and demand for services. The magnitude of these effects are dependent on the degree of change involved and consideration of other forces exerting influence. (*Indicators in italics can be linked to documented change on family functioning, but measurement will not be attempted.*)

FRAMEWORK (Cont.)

PROGRAM GOAL: To Improve Consumption, Production and Saving in the Home and the Preservation and Extension of the Useful Life of Family Housing

INDICATORS OF EDUCATIONAL CHANGE
<p>Change in plumbing, electrical carpentry skills</p> <p>Change in knowledge of preventive home maintenance procedures</p> <p>Change in confidence and willingness to make simple home repairs</p> <p>Change in ability to evaluate the reliability and competence of home repair services</p>

INDICATORS OF PRACTICE CHANGE
<p>Change in numbers of home repairs made vs. procured</p> <p>Change in preventive home maintenance procedures implemented</p> <p>Change in use of reliable and competent repair services</p>

INDICATORS OF SOCIAL-ECONOMIC IMPACT (END RESULTS)
<p>Change in cost of living or real income</p> <p>Change in quality of housing facility and/or market value of home</p> <p>Impact on employable skills and capabilities of family members</p> <p><i>Change in demand on goods, services, and housing stock</i></p> <p><i>Change in the rate of deterioration of housing stock</i></p>

PROGRAM GOAL: To Increase the Capability and Functioning of Individuals by Reducing Stress or the Complications Resulting From It

INDICATORS OF EDUCATIONAL CHANGE
<p>Change in ability to recognize factors producing stress and effects on individual's behavior</p> <p>Change in knowledge of ways to reduce stress in daily life</p>

INDICATORS OF PRACTICE CHANGE
<p>Changes in lifestyles implemented to reduce stress</p> <p>Practicing of stress reduction/coping techniques</p> <p>Change in recognition and support of family members experiencing stress</p>

INDICATORS OF SOCIAL-ECONOMIC IMPACT (END RESULTS)
<p>Change in frequency and/or severity of health problems related to stress</p> <p>Effect on routine functioning (i.e., absenteeism, family disagreements, depression or mental outlook) on self or on others from use of stress reducing techniques</p> <p><i>Change in incidents of alienation and mental health problems</i></p> <p><i>Change in demand for mental health and substance abuse services</i></p>

FRAMEWORK (Cont.)

PROGRAM GOAL: To Enhance and Stabilize Family Functions Through Improved Communications and Quality of Family Relationships

INDICATORS OF EDUCATIONAL CHANGE	INDICATORS OF PRACTICE CHANGE	INDICATORS OF SOCIAL-ECONOMIC IMPACT (END RESULTS)
<p>Change in knowledge of how communications influence the quality of family behavior/relationships</p> <p>Change in ability to analyze relationships and ways to improve them</p> <p>Change in communication skill, e.g., the use of active listening and conflict resolution techniques</p> <p>Change in awareness of sources of help for family problems</p>	<p>Change in use of communication techniques</p> <p>Change in commitment and efforts made to improve family relationships</p> <p>Change in level of involvement in seeking information/assistance to solve problems</p>	<p>Change in frequency of family disagreements and tension</p> <p>Change in use of or need for professional counseling services</p> <p>Change in incidents of maladjustments/social problems</p> <p>Changed demand on family and child support services</p>

PROGRAM GOAL: To Enhance the Capability and Functioning of Individuals in Community and Public Affairs

INDICATORS OF EDUCATIONAL CHANGE	INDICATORS OF PRACTICE CHANGE	INDICATORS OF SOCIAL-ECONOMIC IMPACT (END RESULTS)
<p>Change in knowledge of issues and governing process</p> <p>Change in ability and commitment to become involved in public affairs</p> <p>Change in group process/ community</p>	<p>Change in intensity of participation in public affairs activities</p> <p>Change in individual's leadership roles and activities</p>	<p>Change in amount of time and effort spent on citizen participation in public affairs activities</p> <p>Change in personal confidence competence and satisfaction resulting from public service</p> <p>Change in number of women, minorities and low income persons on boards, planning groups and in public office</p> <p>Change in the ability and level of accountability of governing processes</p>

APPENDIX A*

CONSEQUENCE CATEGORIES

I. EFFECT ON CONSUMPTION, PRODUCTION, AND SAVING IN THE HOME

Families are both producers and consumers of goods and services. Traditionally, families produced most of their food and clothing in the home, performed routine and specialized maintenance tasks, and provided care for the young, old and sick. As markets and incomes expanded over the decades, however, increasingly families turned to professionalized services and mass produced goods. These trends have created increased demands for goods and services, higher costs of living, and the disappearance of basic home production and maintenance skills.

When costs of living sharply increase, the ability to substitute home produce for purchased goods and services and the ability to carefully control spending can make a substantial difference in balancing family budgets. For limited income families, such behavior makes the difference between dignity and desperation. When lifestyles are threatened, families must rely on their own inner reserves of skills, talents, and ingenuity to survive and retain a sense of identity. Extension programs are supporting families to (1) improve the efficiency and quality of home production, (2) maximize purchasing power, (3) stabilize financial conditions through financial planning and management, and (4) change expectations for more responsible use of resources.

A. IMPROVED EFFICIENCY AND QUALITY OF HOME PRODUCTION

Families produce a substantial amount of the goods for family consumption and often sale in the marketplace. But the most significant contribution of home production is in service. The family is a critical source of basic education and socialization, preparing individuals for positive or negative interactions with other systems in society. The care and nurturance in the home makes a substantial impact on individuals' health, mental and physical well-being and likelihood of succeeding in achievement endeavors.⁶ The physical care of clothing and shelter and the personal care of individuals reduce the need for services from the market economy. Helping families enhance the quality and efficiency of these home-produced services releases time for other activities, improves the quality of living, and reduces the cost of living for families.

*Integrated narrative summaries of social and economic consequences of Extension Home Economics programs are derived from discipline-based theory and research. These summaries were prepared by Dr. Mary Andrews, Michigan State University, as an integration of papers prepared by 18 academic professionals in the field.

Home production accrues economic and social benefits for families. For example, nearly one-half million dollars worth of food was recorded as being produced and preserved by limited income EFNEP families in 21 counties in Louisiana in the past two years.

Home prepared infant foods save up to 50 percent over the cost of ready-prepared foods on the market.⁷ For low-income families or families with home produced foods, ability to prepare safe and sanitary infant foods has definite economic advantages.

Through drapery construction, upholstery and furniture refinishing clinics, over three million persons in 1977 improved their home environment and saved 50 to 80 percent of the market value of these goods and services. Home construction, repair and remodeling of clothing stretched resources by one-half million dollars in 1977, created a personalized product and provided a source of family income when developed to a professional level. Select care and home maintenance skills can prolong the wear-life of durables, prevent more costly repair or replacement costs, and preserve the value of the home.⁸ In addition, involvement in maintaining the beauty and functioning of the home provides a source of self-expression, pride, and identity with the neighborhood, important in reducing or preventing alienation, crime, and mental health problems. Interior space appropriately designed for family needs is a factor in encouraging positive family relationships.⁹

B. MAXIMIZED PURCHASING POWER

Long ago Ben Franklin advocated, "A penny saved is a penny earned." With rising costs of living, ability to maximize resources in the marketplace is becoming more and more critical of all families. Estimates made in 1970 suggest that 25 percent of personal consumption expenditures reflect a loss due to haphazard, nonsatisfying purchasing.¹⁰ By teaching families to shop around and compare price and quality, a price differential of from 10 to 45 percent may be found and satisfaction can be increased. Families participating in Extension programs in Texas reported reducing food costs by \$56,600, or up to \$10 to \$40 per month through more careful shopping. More satisfying, effective consumer behavior reduces waste, encourages competition in the marketplace, and helps balance budgets for greater financial stability.

Families can also economize by becoming familiar with consumer protection regulations and ways to interact with dealers to exercise rights. One review of records in Hawaii found that 90 percent of consumer complaints received redress at dollar savings for consumers.¹¹ By demanding redress for faulty or fraudulent

products or practices, families can increase their effectiveness in the marketplace. Such consumer behavior increases competition, placing pressure on unscrupulous dealers.

C. STABILIZED FINANCIAL CONDITIONS

Fluctuating economic conditions can play havoc with family financial plans. Continually reevaluating investments, spending plans, and use of credit can help families stabilize financial conditions through the life cycle and through changing economic conditions. A variety of awareness level or indepth programs available through Extension assisted 17 million families in 1977 control spending and reach short and long term goals. For instance, 75 to 95 percent of the approximately 8,000 families in three States participating in a computerized budget analysis program report changing their spending to reduce credit costs, reduce food expenditures, and hold steady rising utility and transportation costs.¹² More indepth programs with young and low-income families have helped families realign spending and resources for increased control, satisfaction, and success in accomplishing goals. Retirement planning and estate planning workshops help older families plan ahead for changes and learn how to interact with increasingly complex regulatory policies/programs.

Using credit is a widespread, fairly accepted practice for American families and particularly responsible for the high standards of living enjoyed by Americans. However, credit can be expensive and destructive. Families have experienced fewer financial crises and improved their economic conditions with increased knowledge about the use of credit, types of credit vendors, and ways to manage debts. Reduced use of credit can save costs and decrease inflationary pressures.¹³ A debt management program in Michigan returned \$1.1 million to the business community as a result of more careful management practices of clientele. In Mississippi, 2,300 families improved their financial management so as to avoid bankruptcy in 1977.

D. CHANGED EXPECTATIONS

American families have been living in an era of expanding expectations. Cheap fuel sources and explosive advances in technology have made a myriad of consumer goods available to families at affordable prices. No wonder that for the average family, progress has been defined as rising incomes and corresponding consumerism.¹⁴

However, recent energy and water shortages and controversies over pollution of the environment have brought to mind a different picture of what a quality life means. Extension programs are helping families evaluate their value and expectations in relation to the availability of resources. Families are flexible, and new activity and consumption patterns are feasible. But information is needed to help families anticipate how new behaviors may impact

on the larger economy and environment as well as on individual family members.

Families have found, for example, that the choice of housing has grave implications for fuel consumption, demands for transportation, quantity and quality of family interaction, social and recreation alternatives. Even everyday activities such as cooking techniques, choice of laundry detergents, and use of appliances place demands on the environment.

Americans spend nearly \$11.5 billion annually on energy used directly to store, prepare, and consume food in the home - almost half the total for the rest of the food system combined.¹⁵ Households use about 30 percent of the energy produced in this country. Family behavior makes a difference on energy demands.¹⁶ Extension clientele are making substantial changes to reduce energy consumption. A followup study of 200 Iowa families participating in a Home Energy Audit disseminated through Extension found that 40 percent of the sample made one or more major energy conservation improvements. An estimated annual savings of 26 billion BTUs (6,500 barrels of oil) or \$102,000 at 1978 fuel prices would result for the 4,600 audited households.¹⁷ Forty-two States reported similar involvements in energy conservation programming in 1977. Extension is making a major contribution in preparing families to cope with high energy costs and to make lifestyle changes to reduce dependence on fossil fuel energy.

NOTE: While "Changed Expectations" do not necessarily affect consumption, production, and saving in the home, the other categories emphasize measurable activities undertaken by clientele, and thus indicate emphasis on Practice Change as a program goal.

II. EFFECT ON HEALTH THROUGH NUTRITION

Health has improved for Americans over the past century not only because of medical treatments, but because of improved nutrition, sanitation, population, and disease control.¹⁸ Today's chronic health problems are different from the past, but still modification of people's behavior will have a greater impact and cost less than medical intervention. 'Most diseases, both physical and mental, are associated with influences that might be controlled, such as smoking, eating, and exercise.¹⁹

Nutritional status and food practices have a direct relationship to health, well-being, and longevity. The level of energy, vitality, and capacity to pursue work and leisure activities is intricately linked with nutritional status. Children's developing mental and physical capacity is shaped by nutrition. One's resistance to disease, the prevention of some diseases, and the risk factors related to chronic diseases are influenced by adequate (not over) nutrition. George Briggs of the University of California at Berkeley conservatively estimates the costs in health care and lost capacity to function related to poor nutrition in 1977 to be 40 billion dollars.²⁰

Both undernutrition and overconsumption have social and economic costs. Americans spend millions of dollars annually on diet aids and exercise plans to try to lose weight. Obesity is a primary risk factor to a number of diseases and causes social anguish as individuals face rejection and bias.²¹ Extension programs in weight control have been successful by providing common sense advice and a regime of good eating habits necessary for lasting weight control and good health. When people look and feel good their whole image of themselves and life improves.

Americans are becoming increasingly "health conscious" but often lack the knowledge to evaluate new crazes and advertising propaganda. For instance, an estimated one-half of all households contain individuals taking vitamin pills. In the late 1960's, three-fourths of a national sample of individuals believed extra vitamins provide more pep and energy.²² Misinformation related to nutrition results in the expenditure of millions of dollars with no benefits and sometimes harm to consumers.²³ Nutrition hot-lines and news releases have responded to ten million inquiries on the reliability of nutrition information in 1978.

Recent widespread concern about food additives has prompted interest in regulatory processes. Understanding the issues and implications of various policy alternatives is important to allay fears but also to create responsibility for self protection.²⁴

Extension alerts citizens to food safety concerns. People have been taught to avoid food contaminants and poisoning associated with improper preservation techniques. The 1977 National Gardening survey reported that 32 million American families (four in ten) gardened in 1977. Seventy-four percent of those who gardened preserved food from the garden to be accessible at other times of the year.²⁵ Families receive information from Extension to help both increase the efficiency and success of home production and insure a safe nutritionally appropriate preserved product. In Tennessee it was found that 90 percent of the clientele reporting were using the food preservation practices recommended, and 70 percent reported changing practices to incorporate suggestions from Extension for safer food handling. In numerous cases of emergencies such as fire, floods, or power failure, Extension home economists have advised families on the potential threats to the safety of the food supply, preventing food poisoning and illness.

Low-income families are particularly vulnerable to nutritional inadequacies as limited resource and information interact to constrain options. The Expanded Food and Nutrition Education Program has made substantial impact on nutrition knowledge and improved the diets of six million low-income children and adults.²⁶ The assistance provided by the nutrition aide improves the safety and sanitation of the home to reduce health risks. In Michigan in 1977, such improvements and reduced risks of negligence contributed to 289 youngsters remaining at home or returning early from foster care at a savings to the taxpayer of at least \$300 per month per child.

Extension consumer education programs help all families get the most nutrition for their food dollar and caloric intake. With the diversity of food products

on the market and in the media, families experience increased pressures to choose foods for other than nutrition reasons.²⁷ Concerns for overconsumption and rising food prices, however, have motivated families to reevaluate their eating habits and try to get more nutrition from limited dollars and calories. Computerized diet analyses, shopping guidelines, and special programs for the elderly of persons living alone help families make more informed, satisfying, nutritious choices for better health and peace of mind.

NOTE: The above summary indicates that the majority of Extension work in the nutrition area has been in the area of information dissemination, with documentation of practice change largely limited to EFNEP. The stated goal of "effect on health through nutrition" actually translates in practice as "improved nutrition knowledge" unless actual health improvement can be demonstrated.

III. EFFECT ON CAPACITY AND FUNCTIONING OF INDIVIDUALS IN THEIR FAMILIES, JOBS, AND COMMUNITIES

Families have changed dramatically in the past few decades. By 1976, 14 percent of all families were headed by women and even in husband-wife families, the number of dual earners increased sharply. By 1978, over 50 percent of all women worked outside the home, including 36 percent of women with husbands and children under three years.²⁸ Children are more likely to live a portion of their lives in a single parent household and greater numbers of persons live alone or outside the family (24 percent of all households). The security and continuity associated with the family is being threatened. One of the challenges of this fast-paced, individualistic life is finding a sense of identity, meaning, and feelings of control over circumstances. Extension programs help individuals cope with life changes, situational crises, and the demands of social and economic pressures. Recognizing and trying to reduce the stress associated with such events enhances individuals' capacities to function and reduces physical and mental health risks.

A. CAPACITY BUILDING

The most valuable contribution of the family is in the production of human capital - human beings who are competent, reliant, self-sufficient individuals able to function successfully in families, jobs, and the community. Extension programs help families increase the value of the human capital developed in the home.

The family and home are important environments of growth and sources of acceptance and release for persons in all walks of life. It is within the family that individuals develop the basic skills, attitudes, and competencies needed for effective functioning in schools, jobs, and community affairs.²⁹ It is also a source of belonging, security, and worth. Children and adults with confidence or high self-esteem find it easier to tackle new experiences, are most at ease in social situations, and are more likely to achieve in school or on jobs. Extension family life and parenting education is improving the life

chances of children and adults by helping them develop confidence, trust and skills to function more effectively.

Mature adults, especially homemakers facing reentry into the job market or a single lifestyle, are especially vulnerable and in need of new skills and confidence. Extension programs help adults learn how to successfully interact in the employment, financial, and legal arenas.

Involvement in interior design and home improvement are other outlets for self-expression and developing human sensitivities and capabilities. A pleasing personalized environment is important in providing a sense of identity to combat feelings of alienation and rootlessness. A satisfying home allows a family to develop strong emotional attachments to the community, also important in reducing the risks of crime and neighborhood deterioration.

Extension clothing and personal appearance programming help job seekers enhance their clothing selection and personal care skills to improve their chances of getting and holding a job.³⁰ A positive self-image developed through attractive and becoming clothing imparts increased self-confidence. This is equally true for teens trying to express a personal identity while maintaining peer acceptance.³¹ Acceptance is an overriding concern for the elderly and handicapped, too. Extension clothing programs for special audiences such as the overweight, handicapped, or elderly help these individuals look good and feel good about themselves, a big step toward being accepted by others and feeling at ease in social groups.

When individuals are in good physical and mental health, they are better able to perform their expected roles. Good health and nutrition enhances one's capacity to pursue work and leisure activities while reducing health risks. Computerized health checks sponsored by Extension in several States have helped families increase their preventive health practices to reduce risks by 20 percent.³² First aid, home safety, and cancer and disease detection/control programs have increased the capacity of families to protect their health, reducing demand for costly health treatments.

Eighty percent of deaths due to heart disease are premature. Actions of individuals can reduce or delay such deaths.³³ In fact, the risks associated with the three leading causes of death - heart disease, cancer, and accidents - can be dramatically reduced from changed habits and/or early detection. Extension programs are bringing the clinics to the people and encouraging preventive health practices. Judicious use of health services is also promoted by Extension. Physicians admit that at least 25 percent of all illnesses that they see in general practice do not require professional attention.³⁴

Involvements in preventive health enhances human potential and cuts costs.

Another avenue by which Extension has helped individuals function more effectively is through leadership development and community affairs participation. An effective, supportive community requires a broad base of citizen participation. By assisting family members, especially women, learn organizational and political process skills, large numbers of women, minorities, and low-income individuals are serving on advisory boards, commissions, and elective offices. Through Extension, professional and volunteer efforts, health clinics, child care services, and nutrition programs have been established to serve critical needs in communities. For example, as of September 1977, North Carolina Extension helped establish and lead 10 Family Life Councils and 30 local committees that coordinate planning and programming for family education. Active, successful participation in community problem-solving activities creates personal satisfaction as well as more responsive community organizations and services.

B. ENHANCING/STABILIZING FAMILY RELATIONSHIPS.

By stressing healthy personality development, strong and satisfying family relationships, and the use of community resources to assist families reach these objectives, Extension is also helping to reduce the risks of unnecessary divorces, domestic violence, and problem dependencies.

It has been estimated that divorce, a phenomenon that involved one out of two marriages in 1977 and over one million children, can be reduced by nearly one-half (44 percent) with marriage enrichment and premarriage training.³⁵ By exploring more realistic expectations for marriage and solving the little problems as they arise, divorce can be avoided or approached in a less stress-producing manner. If the cost of divorce to society the first year is conservatively estimated at \$1,000 per divorce, nearly half a billion dollars could have been saved in 1977 in additional welfare, child support enforcement, juvenile delinquency, absenteeism, and other divorce related costs through preventive education programs.³⁶

Approximately one million children experience physical or psychological abuse each year, and millions of dollars are spent annually for research and treatment. The costs to society are immeasurable, considering that 70 percent of all convicted murderers were abused as children.³⁷ Physical punishment is a common practice of normal, albeit strict parents that presents a viable model for tension release to countless thousands of individuals. Such actions condone aggression and violence as acceptable behaviors.

Extension is helping to reduce the aloneness, stress, and poverty associated with single parenting to reduce the risk of child abuse. It is among this family type that 52 percent of all abused children are located. Community-based Extension education efforts are also helping neighbors, friends, and volunteers recognize ways to help potentially abusive or neglectful families, creating a supportive rather than punitive atmosphere for change. In many counties, parent aide programs sponsored by Extension have been established to formally train volunteers to work with these families. Such programs reduce the demand for protective services and foster care aid and successfully integrate families into the community.

Most families can benefit from continuing educational inputs. Today's parents face a considerably more complex child-rearing environment than their parents faced 20 or 30 years ago. Television, drugs, sexual freedom, pluralistic values, and complex technologies, all have created tensions between youth and parents of all circumstances. Runaway youth, teen suicides, and drug and alcohol abuse place strains on public services. The root of these problem dependencies as profiled by the National Drug Abuse Conference in San Francisco³⁸ are traceable to the quality of youth's interactional environment and the foundations provided by the family.

All of society's efforts to ease these problems-- spending billions for correctional institutions, prisons, mental health care, reformatories, - - - are attempts to change the child after the fact. When parents know the basis of child development and practice humane, growth-enhancing child-rearing techniques, and when communities provide continuing support to help families function more appropriately and solve problems as they arise, then the stream of maladjusted youth may abate.³⁹ This requires, however, many more resources directed to family life education. In Wayne County, metropolitan Detroit, a waiting list exists for families wanting to take the parenting courses offered through Extension. Social workers in growing numbers of communities are referring their ADC, child abuse, and teenage-head families to Extension classes.

In Ohio, over 1,000 families participated in a "Practical Education for Parenting" program in 1978 with documented changes in child guidance skills and the emotional stability of the home. These same families would have had to pay \$30 to \$60 per hour for professional counseling at \$50 per course offered through a private agency to reap the same benefits. Providing such services to those who would delay or find the cost prohibitive is important to reach families when they are receptive and can benefit from the inputs.

Extension home economists are also working with community planning groups to coordinate services and create special programs for specific groups in need. Much effort has been focused on pre-parenting education of youth and special classes for teenage child bearers. Helping youth accept the roles and responsibilities of parenthood early can help prevent unwanted pregnancies and increase the life chances of these young adults and their children. Programs for the aged are also in demand. When mature children and elderly parents can communicate effectively the chances of creating interdependent living arrangements at affordable cost is enhanced. For instance, if institutional care of the elderly could be delayed by even one year, families would reduce the cost of care by \$200 to \$400 per month ($\frac{1}{4}$ to $\frac{1}{2}$ the cost) of sheltered care), or \$2,400 to \$4,800 per family. Both social and economic benefits occur from family life education.

As preventive and enhancing in nature, Extension programs cannot be expected to stop child abuse, turn around high divorce rates, stop unwanted pregnancies, or make all parents "good." Yet in concert with other educational and social service agencies, Extension programs help to moderate and alleviate some of the stress, confusion, and discord that accompanies family life. Little steps taken early prevent larger problems from developing.

NOTE: Because this area deals with attitudes, values and interpersonal relationships, it is difficult to accurately measure practice change. However, as with the reduction in child abuse cases, it is possible often to concentrate on areas in which Extension's contribution can be meaningfully determined.

NOTES

1. *Social Indicators, 1976: Selected Data on Social Conditions and Trends in the United States*, U. S. Department of Commerce, Office of Federal Statistical Policy and Standards, Bureau of the Census, Issued December, 1977.
2. Ibid.
3. E. Elliot, P. Boyle, and B. L. Ralston, *Final Report of the Cooperative Evaluation Project in Home Economics*, University of Wisconsin Extension, 1977.
4. Claude F. Bennett, *Analyzing Impacts of Extension Programs*, USDA, 1976.
5. M. P. Andrews, "An Ecological Approach to Problems in Home and Family Life: An Education Perspective," in *Conference Proceedings: Living in America - Home Economics for the Third Century*, Cornell University, Ithaca, New York, November, 1977.
6. B. Paolucci, M. Bubolz, M. Rainey, V. Boyd, M. Ferris, L. Nelson, and M. Andrews, *Women, Families and Non-Formal Learning Programs*, Institute for International Studies in Education, Michigan State University, 1976.
7. B. Peterkin, and S. Walker, "Food for the Baby . . . Cost and Nutritive Value Considerations," *Family Economics Review*, Fall, 1976, p. 3.
8. M. Wentz, A. C. Lloyd, and N. Watt, "Experimental Removal of Stains," *Textile Chemist and Colorist*, Vol. 10, No. 7, 1975, pp. 30-34.
9. Charlan Craff, "Making a House a Home," *Journal of Home Economics*, May 1977, pp. 11-12.
10. Ruth E. Deacon, "Consumer Competence and Family Resource Use," Interim Research Evaluation Committee, ESCOP, August, 1979.
11. Loren V. Geistfeld and Roberta K. M. Choy, "An Analysis of Third Party Consumer Complaint Handling Mechanisms: The Hawaii Office of Consumer Protection," *Journal of Consumer Affairs*, Summer, 1978.
12. D. Wetters, I. Hathaway, S. Clarkson, "Identifying, Developing, and Testing Indicators and Levels of Change in Consumer Competency of Adult Family Members Involved in Extension Home Economics Programs," Final Report, Michigan State University, January, 1979.
13. Jean Kinsey and Sylvia Lane, "The Effect of Debt on Perceived Household Welfare," *Journal of Consumer Affairs*, Summer, 1978.
14. George Katona, *Psychological Economics*, Elsevier Scientific Publishing Company, Inc., 1975.

15. R. VanArsdall, Thomas and Patricia J. Devlin, *Energy Outlook for Fuel in 1979*, Paper presented at the National Agricultural Outlook Conference, Washington, D. C., November 16, 1979.
16. Barbara Dalafut, *Energy Conservation Potential: Michigan*, Contracted paper for Dr. Mary Andrews, March, 1979. Available from the Institute for Family and Child Study, Michigan State University.
17. Mary H. Yearns, *Residential Energy Audits - The Best of Both Worlds*, Iowa, 1978.
18. Thomas McKeown, "Determinants of Health," *Human Nature*, April, 1978, p. 60.
19. Ibid, p. 65.
20. Senate Select Committee on Nutrition and Human Needs, *Dietary Goals for the United States*, Second Edition, Part 1, p. 2.
21. T. J. Coates and C. E. Thoresen, "Treating Obesity in Children and Adolescents: A Review," *American Journal of Public Health*, Vol. 68, 1978, p. 143.
22. *A Study of Health Practices and Opinions*, Food and Drug Administration, Rockville, Maryland, 1972.
23. *Food and Nutrition: Knowledge and Beliefs, A Nationwide Study Among Food Shoppers*, Food and Drug Administration, Rockville, Maryland, 1974 and 1975.
24. *A Summary Report on U. S. Consumers' Knowledge, Attitudes, and Practices About Nutrition*, The Nutrition and Marketing Research Department, General Mills, Inc., Minneapolis, 1977, and Tankelovich, Skelly, and White, Inc., "Nutrition, A Study of Consumers' Attitudes and Behavior Towards Eating at Home and Out of Home," *Women's Day*, New York, 1978.
25. *Gardening in America*, Result of the 1977 Gallup Poll - Gardens for All - National Gardening Survey, Gardens for All, Inc., Shelburne, Vermont, 1977.
26. Nancy B. Leidenfrost, *Expanded Food and Nutrition Education Program Update*, Paper presented at the National Agricultural Outlook Conference, Washington, D. C., November 15, 1978.
27. A. C. Manchester, "Marketing Development," *National Food Situation*, March 19, 1977.
28. *U. S. Census Special Release: Population Characteristics*, U. S. Government Printing Office, 1979.

29. Paolucci, Bubolz, Rainery, Boyd, Ferris, Nelson, and Andrews, op. cit.
30. E. A. Kelley and D. C. Anselmo, "Career Appearance Education for Women Who Aspired to White Collar Positions," *Home Economics Journal*, Vol. 6, No. 1, 1977, pp. 64-75, and Morton, G. M., "Open Forum: Psychology of Dress," *Journal of Home Economics*, Vol. 9, No. 28, 1926, pp. 584-5.
31. M. Perry, "Relationship of Clothing to Personal and Social Acceptability of Adolescents," Western Regional Research Cooperative Project W-98, Washington State University, 1972, and M. C. Williams and J. B. Eicher, "Teenagers' Appearance and Social Acceptance," *Journal of Home Economics*, Vol. 58, No. 6, 1966, pp. 457-461.
32. Charles O. Crawford, *Social Consequences of Health Education Programs*, Unpublished manuscript, Penn State University, 1979.
33. John H. Knowles, "The Responsibility of the Individual," in *Deadalus*, Vol. 106, No. 1., Winter, 1977, p. 63.
34. See: Lowell S. Levin et. al., *Self Care: Lay Initiatives in Health*, Prodist, New York, 1976, p. 14.
35. Bureau of the Census, Department of Commerce, *The U. S. Factbook, The American Almanac*, 98th Edition, New York, 1978.
36. Leo Yates, Paper presented to the National Extension Evaluation Project, Unpublished manuscript, Las Cruces, New Mexico, 1979.
37. Diane Taft, *A Report on Extension's Role in Combating Child Abuse*, Unpublished manuscript, University of Idaho, 1979.
38. H. Stephen Glenn, *Getting it Together: A Developmental Approach to Prevention, Intervention and Rehabilitation of Dependencies*, Paper presented at the National Drug Abuse Conference, San Francisco, 1977.
39. Jerry Bergman, "Licensing Parents: A New Age of Child-Rearing," *The Futurist*, December, 1978.

APPENDIX B

SAMPLE INDICATORS* OF SOCIAL AND ECONOMIC CONSEQUENCES OF CONTEMPORARY EXTENSION HOME ECONOMICS PROGRAMS

I. EFFECT ON PRODUCTION, CONSUMPTION, AND SAVING IN THE HOME

A. INCREASED REAL INCOME THROUGH HOME PRODUCTION

- . \$300,000 worth of food produced and preserved by 4,000 low-income families in 1977.

B. DECREASED COST OF LIVING AND MAXIMIZED PURCHASING POWER

- . Decreased personal consumption expenditures by up to 25 percent through more careful shopping.

C. INCREASED FINANCIAL STABILITY

- . \$1.1 million worth of debts repaid to the business community in a Michigan county through a low-income family debt management program.
- . 17 million families able to meet short- and long-range goals through budgeting and controlled spending.
- . 75 - 90 percent of 8,000 families in three States reduced credit, food, and utility costs as a result of analysis of personal expenditures with a computerized budget audit.

D. CHANGED BEHAVIOR THROUGH AWARENESS OF ENVIRONMENTAL AND SCARCE RESOURCE

- . Reduced energy consumption - 26 billion BTUs saved through conservation involvement of 4,600 families in Iowa in 1977.

II. EFFECT ON HEALTH THROUGH NUTRITION

A. IMPROVED NUTRITIONAL STATUS OF FAMILY MEMBERS

- . Measures of nutritional adequacy of diets of EFNEP homemakers more than doubled over 24 months of program involvement.
- . Since its inception, over six million family members' diets have been influenced by participation in the EFNEP program (number of families reached per dollar cost of program).

- B. DECREASED HEALTH RISKS THROUGH IMPROVED FOOD HANDLING AND CONTROLLED CONSUMPTION
 - . 90 percent of Tennessee Extension clientele report using recommended food preservation practices.
- III. EFFECT ON CAPACITY AND FUNCTIONING OF INDIVIDUALS IN THEIR FAMILY, JOBS, AND COMMUNITIES
 - A. REDUCED COST/DEMAND FOR HEALTH TREATMENT THROUGH ADOPTION OF PREVENTIVE HEALTH/SAFETY MEASURES
 - . 6,200 persons screened for hypertension in two States.
 - . 9,000 women referred for diagnosis out of 50,000 screened for breast cancer in one State with personal savings of \$8,250 for costs of check-up done.
 - . 100,000 smoke detectors installed in rural homes in one State.
 - . 20 percent potential reduction in health risks through changed behavior after participating in computerized health audits.
 - B. ACCESS, PROVISION, AND USE OF NEEDED SUPPORT SERVICES
 - . 6,000 hours of volunteer time donated in one State to health care clinics.
 - . Ten original and 30 local committees/councils organized in one State to plan and coordinate family education programs since 1977.

IV.

PROGRAM-SPECIFIC CONSEQUENCES Home Economics Programs

INCREASED REAL INCOME THROUGH HOME PRODUCTION AND MAINTENANCE

The estimates for programs considered to increase real income through home production and maintenance are summarized in table 1. Food preservation and home gardening involve the largest total clientele followed by home repair and clothing construction. Very little information could be found on the actual value of or savings due to home repair, but considerable information was available on the value of food preservation, home gardening, and clothing. The Gallup Poll data show that the most common subject on which people receive information from home is food preservation (29.9 percent), with nutrition second (22.3 percent), and energy conservation third (22.1 percent).

FOOD PRESERVATION AND HOME GARDENING

Two national surveys highlight the extent to which Americans rely on Extension home economics for food preservation information. A USDA survey in 1975 found that about 32 percent of households in the United States have a homemaker who cans food. While friends, relatives, cookbooks, magazines, and newspapers were identified most often as sources of canning instructions, 11 percent of canners identified Extension Service publications as a source. Nine percent identified USDA publications as a source of instructions. Since the information provided by other sources could draw on Extension or USDA publications, these figures likely underestimate the dissemination of such information.

A Gallup Poll survey, commissioned for this evaluation effort, found that about 51 percent of a national sample reported receiving some information from home economists; the most commonly cited subject of such information was food preservation. About 30 percent of persons receiving some information reported that the subject was food preservation. If all persons in this survey, including those who have received no information, are considered, then an estimated 15 percent of adults in the United States have been reached with such information at some time. The percentage is even greater if groups likely to engage in food preservation are considered. For example, the Gallup data suggest that 18 of every 100 adult women have been reached, as have 25 percent of persons living in small towns and rural areas. Finally, of persons reporting receiving such information, 90 percent reported that it was "very" or "fairly" useful.

One of the most intricate attempts to estimate the value of home economics food preservation information was a study carried out in the State of Washington. Its Cooperative Extension Service questioned a random sample of 616 individuals who had called county offices for food preservation information:

- . 85 percent said they did make use of the information,
- . 10 percent more used pressure canners than at the time of Extension contact,
- . 8 percent more used standard Mason jars,
- . 61 percent said they changed a procedure after contact,
- . persons attending workshops were more likely to change procedures than telephone contacts alone, and
- . 69 percent felt they saved money by preserving food at home, with an average estimated savings of \$28.28 per month, or \$339.36 annually.

Even for the sample questioned, the savings exceeded the cost of the program. When generalized to all individual persons making contact with Extension (16,673), annual savings appeared to have totaled \$2,325,634. This figure is 57 times greater than Extension's dollar investment in providing that food preservation information exceeds the entire Federal appropriation for all home economics Extension activities in all content areas for the State of Washington.

Home Economics Extension cannot necessarily take credit for the total of public savings, since most of the people questioned may have preserved food without Extension information. However, the public does seek such information and reports making use of it as an activity which increases their real income and improves their nutrition. Moreover, the survey does show that such information seems to increase the probability that goods will be preserved safely through the use of tested procedures (e.g. pressure cookers, standard jars, etc.).

Estimates reflected for home gardening and food preservation are much greater than the amount an "average" American saves, based on a USDA survey of number of quarts of fruits and vegetables canned. At a savings of 30 to 40 cents per quart (store cost minus expenses of food and canning supplies), the average would be between \$22 and \$30 per year. If the savings attributable to freezing and drying are added, a conservative estimate of the amount saved through home preservation might be around \$75 per year for the average home which preserves food in some fashion.

The estimates for homemakers who contact Extension are two to six times greater. The state estimates may be higher than the USDA estimates because those states which provide estimates are farming and gardening states. Moreover, homemakers who seek information from Extension or participate in food preservation programs likely preserve more than the "average" American homemaker.

Extension efforts have been concentrated in rural areas; the USDA survey shows 53 percent of rural households having home canners as compared to 20 percent of households in large cities and 33 percent of households in other urban settings. Regional data indicate a greater proportion of canners in the West (40 percent), Midwest (37 percent), and South (35 percent) than the Northeast. The Washington estimate of savings is 4.5 times greater than what might be estimated for the average American, but rural and regional variations alone could easily generate such a deviation from the average.

While the authors of the Washington State Report were surprised at the estimate of \$339.36 annual savings, it is not out of line with the range of estimates in other state reports. In four other State narratives, average savings ranged from \$166.67 to \$464.11.

If the \$339.36 figure is used as an estimate of annual savings due to home food preservation, plus the estimate with the participation data provided in the state followup, the average savings per state are about \$14 million, which exceeds the average total appropriation for those states by close to three times. Moreover, this may be a conservative estimate, since the USDA survey suggests that about 2 percent of all Americans both preserve food and identify Extension publications as the source of instructions. If generalized, the 9-state estimate would suggest that just 1 percent of Americans (1.5 million) drew directly from Extension home economics resources for such activity in 1978. Dissemination of Extension education via clients, friends and relatives and through the media multiplies the value an undeterminable amount.

While home gardening and food preservation are closely related activities (participants in one area are highly likely to participate in the other), there is more information available on food preservation. This interrelation is reflected in a USDA survey reporting that 80 percent of households that preserve fruits and vegetables also have gardens. Considering the overlap, the total savings for the two activities together are far less than the sum of the two estimates. As was the case for food preservation, there is a range of savings estimates in state narratives from \$150 (Pennsylvania) to \$600 (Louisiana) per family per year. A study of 60 families in Florida reported that the value of vegetables produced per family was \$388.29, and the estimated cost of a garden was \$53.59. This resulted in a savings of \$334.70 per family per year. Again, there is great variation in gardening from State to State and the States with the highest estimated savings are those more rural ones which can be expected to have more and larger gardens than the average.

CLOTHING. Another major category of programs which increases real income is clothing construction. Based on estimates provided in six state reports, the average saving realized per participant is about \$50 annually, or \$18.88 per item of clothing made. The cost of making an item of clothing at home is estimated to be about one-third the purchase price of a comparable item in a store. The savings realized by participants in Extension clothing construction programs appear considerable.

For example, in Tennessee in 1978, the estimated savings were \$128,555 for 5,740 participants. In Texas, 11,142 participated, which suggests a possible saving of over one-half million dollars in 1978 alone. In each instance, the public savings represent 3 to 4 percent of the total appropriation for all Extension home economics activities in all program areas, while accounting for between 1 and 2 percent of total participants. For a sample of 10 States providing detailed data on participation, the average was 8,223 clothing construction participants per State. The average savings associated with such activity equalled about \$411,150 per State in 1978.

A study conducted in Tennessee examined homemaker contacts with Extension among participants engaging in different clothing practices. It shows a definite association between the practice of Extension recommended procedures and involvement with Extension. Women who followed Extension program recommendations for clothing were generally more likely than those not following recommendations to have attended home economics meetings, visited or telephoned the Extension office, and received Extension newsletters. Contact with Extension home economics was associated with wardrobe planning; care in selection, maintenance, and use of recommended sewing procedures in clothing construction; and recycling of clothing.

Home Repair. Other programs which help to increase real income are home repair and maintenance, furniture refinishing, reupholstering, and sewing machine maintenance. Home repair involves a sizeable number of participants, but little data on actual savings are available.

Financial Management and Consumer Affairs. The Gallup Poll assessing dissemination of Extension home economics information found that about 10.1 percent of people receiving information from home economists identify the subject as consumer affairs or money management. These programs together with energy conservation appear to be growing in popularity as American families attempt to cope with inflation and fluctuations in the economy.

A search by Kappa Systems, Inc., of home economics studies published between 1961 and 1978 revealed six dealing with consumer affairs and resource management, none of which provided any real data on economic consequences. However, there is evidence that people believe they benefit from such programs and that they are saving as a result of them; there is also some evidence of practice and knowledge change. For example, an evaluation of a televised consumer education program ("Consumer Casebook") in Connecticut found that, as a result of the material presented, 88 percent of respondents reported checking warranties, 53 percent reported getting written estimates on car repairs, and 300 percent reported contacting consumer agencies. These percentages are far greater than for the general public.

Most State narrative reports provided too little information to adequately assess the full impact of these kinds of resource and consumer programs, but they do provide good clues concerning client response.

- . A study in Arkansas surveyed practice change in food buying based on home economics newspaper articles and reported that 37 percent of those polled said they improved buying practices. Since circulation involved 64,000 readers, the impact could be quite substantial.
- . A workshop with an unspecified number of participants in Minnesota provided guidance in buying older homes; average savings for those who did buy within six months after the course was reported as \$2,000.
- . Of 73 clients attending meetings on meat buying in Alabama, 96 percent reported an average savings of \$88 per month over four months, 97 percent reported they learned to read labels, 91 percent improved storage, and all reported improved cooking methods. Since each person reported passing the information on to an average of seven others, the value of the program extended well beyond participants.
- . A consumer counseling program in New York involved 156 clients of whom 126 developed financial plans.
- . In Nebraska, 95 percent of the audience for a program to protect consumers against fraud rated the lesson "very helpful," and all the participants in a correspondence course in Kentucky felt they learned something new and passed information on to 61 others.
- . A program in Missouri saved participants an average of \$40 each by encouraging them to exercise their warantee rights on malfunctioning sewing machines.
- . A program in Massachusetts sought to improve relationships between growers and consumers in the marketplace; of those evaluating the program in a questionnaire, 72 percent said they saved money as a result, 92 percent felt they received fresher produce, and 64 percent felt the net effect was that there are more fruits and vegetables.

There is a wide variety of home economics programs concerned with general financial management and planning, both for the general public and for a variety of special audiences. Some of the reported audiences are huge. For

example, in 1977 Mississippi reported about a "Pocket Watch" program that had an audience of 96,882. The average number of participants was 26,400 per State participating in programs on financial management and estate planning in nine followup States contacted in July 1979.

There is relatively little information on economic consequences, but considerable information on client response and practice change:

- . One-half of participants in six county money management programs in Nebraska report using information gained in counseling sessions.
- . Of 218 participants at meetings on funerals and funeral insurance, 24 percent made changes in legal matters, 28 percent made changes in protection plans, and 21 percent discussed business affairs as husband and wife for the first time as a result of the meetings.
- . Programs in estate planning in Alabama have increased the percentage of people making wills and planning with their families; similar results have been obtained in Michigan, Texas, and Kentucky.
- . Evaluation of a special program for women in South Dakota found that 31 percent established their own credit rating following the program.
- . One hundred percent of 91 young couples attending financial management conferences in Massachusetts reported having their needs met by the program.
- . Two pre-test--post-test program studies, one in Connecticut, the other in Massachusetts, showed change in knowledge on financial matters.
- . For a program involving 1,400 clients in North Carolina, 90 percent reported that, as a result of the program, they better understood their financial situation and how to improve it, and 66 to 95 percent identified specific changes to be made to better manage their finances.

One large scale program which reached a sizeable audience in some States was computerized financial assessments provided to the public at shopping malls,

home shows, and fairs. Similar programs have been carried out in different States under a variety of names such as "Dollar Watch" (Michigan), "Money Check" (Nebraska, South and North Dakota, Montana, Wyoming), and "Speedy Spend" (Washington). These programs are designed to provide families with a means of comparing their spending patterns with other families to gain better awareness and control of their own finances. A followup of South Dakota families using "Money Check" at a shopping mall showed that nearly one-half were surprised and found the information helpful for assessing their financial situation. Fifty-two percent of families either developed or adjusted budgets, changed spending habits, or some other financial practices. A followup phone interview with participants in the Michigan "Dollar Watch" version of this program disclosed that 39 percent revised previous goals, 20 percent set new goals, and 49 percent now maintained a recordkeeping system. Other results were reported by 9 to 75 percent of families. Evidence of actual practice change as well as respondents' reports of changes were obtained. As a means of enhancing awareness, the program appeared effective for 75 to 95 percent of participants.

ENERGY CONSERVATION

While programs designed to enhance the real income and financial security of the public can be viewed as facilitating individual economic goals, they can be viewed from a national perspective as contributing to national goals as well. For example, improved individual financial management can translate nationally into a smaller proportion of bad debts or bankruptcies. Nowhere is this dual nature of economic objectives was it more obvious than in the conservation of scarce resources such as energy and water. As the cost of these increases, their conservation increases real income of the individual and facilitates national objectives of energy independence and resource management.

As a topic of information identified by persons reached in The Gallup Poll, energy conservation ranked third (22.1 percent) behind food preservation (29.9 percent), and nutrition (22.3 percent). Generalizing from the national poll data, about 11 percent of adults in the United States received some information attributed to home economists. Eighty-two percent reported that this information was "very" or "fairly" useful. This translates into approximately 9 percent, or about 14,500,000 adults. Based on State followup data, the average was 25,822,000 people reached in 1978, which is just under 1 percent of the adult population (.083 percent).

Assessments of the energy savings attributable to many Extension programs were sometimes speculative; that is, rather than assessing how much is saved the focus was on how much could be saved. For example, Arkansas reported on an energy conservation program involving microwave ovens with a projected savings of 2 trillion BTUs and \$20,000. Another Arkansas study reported estimates of actual savings derived from an evaluation survey form on heat conservation through insulation. Based on the number who added insulation, storm windows and doors, and caulking, the estimated savings were \$31,610 or 3 trillion BTUs. Applied to all participants in the program, average savings were about \$72 per participant. Applied to only those actually making changes, savings were \$179.60 per participant.

In addition to the microwave program discussed earlier, home economics programs have sought to encourage use of slow cookers; one followup study in South Dakota reported an 86 percent increase in frequency of use following lessons on the topic. Programs to encourage solar drying of foods were reported in Tennessee, with several participants building solar dryers and many more drying foods for the first time. However, there were no details on the number of people involved in the program.

Similar energy conservation programs were reported on by Nebraska and Missouri. Nebraska reported that 130 low-income homes were insulated in one county, with an estimated savings of \$7,800 during a six-month period. The Missouri program involved 489 families, with savings ranging from \$18 to \$31 per month. Of 150 participants included in an Illinois study, 50 percent made insulating window shades following a lesson on the topic.

Two studies suggested reduction in water and/or energy use through changes in practice or landscaping. In Minnesota, the number of loads of washing decreased from 2.4 per family per week in 1977, to 1.8 in 1978; the proportion of hot water washes fell by ten percent. These changes may have been due to the home economics program, but without data or trends for non-participants, it is not possible to determine. Similarly, Louisiana reported an increase in conservation through landscaping by low-income families but provided no details.

At least five States (Iowa, Kentucky, Massachusetts, Nebraska and Washington) reported on programs involving the evaluation of homes for energy saving. Followup data on two were solicited and specific details were available in State narratives for one more. The Massachusetts project "Energy Conservation Through Home Evaluation" (ECHE) was evaluated by an outside agency, the Massachusetts Energy Policy Office. ECHE teams audited homes for free in seven of 13 counties and made recommendations for decreasing heat loss. Of 3,500 home audits, evaluations were completed for 1,000. Sixty-five percent of those returning evaluations had taken actions within two months of the audit and another 30 percent intended to do so. Actual savings for those who followed at least one recommendation was about 16 percent of their fuel bill.

If all recommendations had been followed, the potential savings would have been about 42 percent. Actual savings in fuel averaged about \$148 at \$.50 a gallon. Based on a computer assessment, it was estimated that the program generated \$2.3 million in new disposal income-over-costs (including program costs and those incurred by clients in following recommendations). For the homes audited, total saving in fuel was estimated at 2 million gallons of oil per heating season.

Kentucky reported on a computerized home energy analysis program (CHEAP) which informs homeowners of the marginal returns for additional insulation. By combining estimates of savings with actual additions in insulation, estimates of dollar savings attributable to the program can be calculated. In the Kentucky report, 375 of 758 persons returned evaluations. The majority of participants (52 percent) had planned to insulate before participating in CHEAP, and one-half followed through after participation. Eleven percent of those who had not planned to insulate were influenced to do so. Participation in

the program influenced the final decisions of about one-third of the participants. Estimated savings for homes which were insulated was \$14,492, or close to 6 million BTUs. The average was about \$57 per home.

A home energy audit program in Iowa reported comparable results, with 40 to 52 percent actually following through on their plans (depending on type of improvement), with the majority of respondents reporting that the information was "useful." Average yearly savings were estimated at \$75 for one or more improvements. Assuming that the program influenced about one-third of those who took part (based on the Kentucky study), total savings for 3,500 participants would have equalled about \$87,500 in 1978.

STABILIZING FAMILY RELATIONSHIPS

To help married persons gain insights necessary to develop marital relationships, a series of 12 television programs entitled "Living Married" were developed by Cooperative Extension staffs in Minnesota, Iowa, Wisconsin, North Dakota and South Dakota. From 1974 to 1977, an estimated 50,000 adults viewed the program in five States, and over 300 discussion groups met on common marital issues. Evaluation questionnaires, personal comments, letters, and phone calls indicated an overwhelmingly positive response to the series. A survey in 1974 of 136 viewers noted that respondents viewed on an average of 8 out of 12 programs, and they rated the series 7.5 on a 10-point scale for being generally sound and attractive.

Sixty-five percent of the respondents indicated that they discussed ideas from the series with their spouses. At least 10 percent mentioned that the series offered reassurance that their problems were not unique. Seventy-five percent reported a better understanding of the value of good communication in marriage and reported working on improved communications and conflict management.

Change observed from pre-to-post-testing over a period of 3 months for a group of 82 viewers in a 1976 Minnesota study suggested that over 50 percent changed their attitudes toward accepting conflict as natural and manageable, believing in equality in marriage and in growing in knowledge of in-law matters.

In Oregon a series of "Marriage Enrichment" workshops produced similar results for over 7,000 individuals and professionals. Based on 350 evaluations completed at the end of the series, 65 percent of the respondents said the series had made a significant contribution to better understanding of marriage relationships, 75 percent reported improving their listening and communication skills, and 63 percent reported changing expectations for their marriages.

THE GROWTH OF CHILDREN

All States offer education programs in the area of parents interacting with and supporting the growth of children. In Ohio, for example, 1,000 families participated in a "Practical Education for Parenting" program this past year.

Teachers' observations and parent evaluations indicated that parents increased their skills in guiding child development, enhanced the emotional stability of the home, and decreased stress for children and adults. Over 50,000 families in Pennsylvania received learning packets to increase their parent skills. Two thousand copies of a similar home study course for new parents were used by low-income parents in Washington. Based on followup contact with 53 participants who completed the five-lesson course, parents reported having learned basic infant care skills.

As part of a larger research and demonstration project for the Department of Health, Education and Welfare, the National 4-H Club Foundation implemented and evaluated "Education for Parenthood" programs from 1973 to 1977 in Texas, Minnesota, California, and Maryland. By linking teens with adult leaders (many young parents themselves), the teens grew in understanding of the role and responsibility of parenthood. Based on questionnaires designed for the national evaluation effort, the 94 4-H member sample, after participation, expressed more positive opinions about children, about parenthood, and about themselves. They also expressed increased interest in careers in child care and rated themselves more proficient in being able to care for children. 4-H members found the program particularly culturally relevant and 64-84 percent of the parents of these teens felt positive about the program.

A "Parent-Child Interaction Program" developed in Missouri, and now used in 23 States, focused on enabling parents to help their pre-school age children develop intellectual skills. Based on evaluation data gathered from 550 families who participated during the development of the program from 1975-77, 91 percent of the children showed gains in cognitive and perceptual skills as measured before and after participation, using the Cognitive and Perceptual Skills Test (CAPS). The mean gain score for these 523 children was 10.7 points on a 63-item test. Parents increased their understanding of their children and the quality of their interactions while using structured play materials. Over 2,500 families have already participated in the program which is being expanded yearly.

A "Children and TV" project developed in Wisconsin and used in other States helps parents understand the impact television can have on human behavior, and it shows concerned citizens how they can take steps to influence stations to make TV watching more constructive for their families. As a result, families are changing their viewing habits, and adults and children are becoming more resistant to television advertising. In Louisiana, over 400 families mailed petitions of disapproval to sponsors of undesirable TV shows, while in Michigan 125 mothers took action requesting local TV stations to reduce violence in programs shown Saturdays and after school.

ENHANCING COMMUNITIES

Because children and the care they receive are critical to our individual and collective futures, care providers and the parents who use this form of service were identified as key audiences for nonformal educational programs and for supportive services by the New York Cooperative Extension Service staff.

Benefits resulting from the program included:

- . Formation of the Family Day Care Provider Association of Nassau county,
- . A certificate training course for licensed or unlicensed providers,
- . Involvement of teens in a home visitor program,
- . Involvement of lay citizens through advisory structures and advocacy projects,
- . Increased acceptance, or responsibility within the formal child care network (although not necessarily funding), for the provisions of supportive services to upgrade the quality of family day care, and
- . Family Resource Centers were expanded to three counties.

Other States such as Michigan, Missouri, Iowa, Wisconsin, etc., have strong continuing university-based programs of support for child care providers. Through their efforts, increased numbers of child-care centers are meeting licensing standards, increased numbers of staff are receiving Child Development Associate (CDA) credentials, and the quality of the child care environment is improving for the benefit of the children and families involved. A number of States are also involved in organizing "community support groups."

Connecticut, through involving 12 aides and six volunteers in an indepth Geriatric Nutrition Education program conducted at congregate meal sites, reached 42,566 people and reported the following changes in eating patterns:

- . 25 to 50 percent increased consumption of nutrient-rich fruits and vegetables,
- . 80 percent increased dollar savings as a result of better meal planning,
- . 75 percent of the elderly shared what they learned with others,
- . Several hundred additional volunteer leaders of Extension assisted over 1,000 additional elderly citizens, either individually or in groups, to maintain and improve nutrition habits. Utah, Arizona, Texas, and Pennsylvania also recruited volunteers to work with the elderly at nutrition sites.

A number of Extension Service units use innovative program efforts to train and support volunteer and non-Extension professionals and paraprofessionals:

- . Iowa produces Independent Study Programs (ISP) which can be used by volunteer leaders to teach club and organization members. In the 1978 program year, 24 ISP programs were used 787 times, reaching 16,221 people. Audiences ranged from elementary students to senior citizens, with the largest number ranging in age from 30 to 50.
- . Michigan annually sponsors a college week event. In 1978, 1,200 adult learners from 83 countries and 6 States participating were able to enroll in 3 of 50 class options. Evaluations conducted 6 months after the event showed that 93 percent of the 250 respondents shared the information learned in classes when they returned home, with 40 percent reporting teaching material learned at college week to groups in their communities. The 100 teaching packets available for use with community groups in Michigan were used 1,300 times in 1978, reaching an estimated 23,000 persons.

An indirect benefit derived by some Extension-trained groups is the ability to use the skills learned from involvement in educational programs to create income-producing jobs for themselves or businesses.

HOME ECONOMICS NUTRITION EDUCATION PROGRAMS INCLUDING EFNEP

REACHING THE PUBLIC

How successful have Extension home economics programs been in providing nutrition information to the American public? According to a Gallup Poll commissioned by the Federal Evaluation Project, 22 percent of persons receiving information from home economics indicate that nutrition was the subject matter. Nutrition was named second only to the related topic of food preservation. Considering that about one-half of the sample had received information on some topic, the data indicate that about 12 percent of the American adult population has received some information specifically on nutrition from Extension home economics. Of those receiving information on nutrition, about 87 percent indicated that the information was either "very" or "fairly" useful.

In a July 1979 survey of Extension home economics participants in New York, North Carolina, Arizona, and Wisconsin, the number one topic on which respondents indicated receiving some information was "foods for good health"

83 percent, followed by "preparing nutritious foods" (80 percent). Moreover, information on those topics was to be useful by a greater proportion of participants than any other topic. Eighty-five percent found information on preparation of nutritious foods to be "a lot" or "some" help as did 77 percent of those receiving information on foods for good health.

Followup data provided by 11 States (summer 1979) yielded an average of 57,856 participants per State in nutrition programs involving food preparation; 83,399 for general nutrition education; and 6,717 for weight control. An average of 1.2 percent of the total State population of all ages was involved in some fashion with food preparation programs; 1.9 percent in nutrition education; and 0.1 percent in weight control (relative to the population of those followup States).

In sum, The Gallup Poll showed a quite sizeable percentage of adult Americans being reached over the years. The 11 State followup data showed between 1 and 2 percent of the entire population was reached in 1978. Finally, both Gallup Polls and the 4-State survey showed such information to be useful in the opinions of at least 8 out of every 10 people surveyed.

INCREASED KNOWLEDGE

While few nutrition education programs have been evaluated, those that have been are likely to show enhancement of nutrition knowledge. For example, a study of nutrition education in a summer recreation program for youth in Connecticut found significant positive changes in nutrition knowledge between pre-test and post-test. Similarly, a nutrition education program presented to fourth graders in an Arkansas county found a significant change in pre-test, post-test nutrition knowledge. In Florida, newsletters to parents of kindergarten students were evaluated by parents, 74 percent of whom indicated the information was new to them and 100 percent felt it had been useful. Mass media materials in Illinois were evaluated as "useful" or "very useful" by 75 percent of respondents. A nutrition workshop evaluation in New Jersey showed that respondents felt more aware (81 percent) and said they had a better understanding of nutrition (73 percent) as a result of the program.

WEIGHT CONTROL

The area in which the most definitive results data were reported for a large number of States was Extension weight control or maintenance programs. Clients in the average weight control program lost about 1 pound per week. Using reported results from 12 States carrying out weight control programs, the mean weight loss was 11 pounds per participant. The range of loss was between 3 and 23 pounds for programs running for an average of 11.6 weeks (using a 5-State estimate). Other important program consequences which were documented by 6 States included:

- . Clients formed definite commitments to changing food habits,

- . Weight loss was achieved through serving more nutritious meals,
- . Clients improved self-concept with weight loss,
- . Clients became more aware of eating habits, consumed fewer calories and began exercising,
- . Shopping practices were changed, awareness of nonnutritional food was heightened, and fruit and vegetable consumption was increased.

One State reported practice change in the area of "types of calories." Its program, aimed at the elderly, reported a 65 percent practice change associated with trying new recipes. Another State reported success in encouraging physical activity. A shape-up program reported documenting a more positive attitude toward physical activity.

CHANGED FOOD CONSUMPTION

There are numerous studies reported in State narratives, published literature, and special reports on changes in food consumption resulting from other Extension nutrition education programs. A study in Tennessee found that members of Home Demonstration Clubs receiving nutrition education did better than public housing homemakers in types of food kept on hand and use of recommended nutrition practices. An earlier study in Tennessee obtained essentially the same results.

A large-scale study of homemaker groups in Minnesota included an assessment of knowledge of nutrition principles. Results of before-after tests show that women did learn principles in the course of leader training as well as during local homemaker group meetings and that they did retain knowledge at least once month following lessons.

Other reports from Arkansas and New Jersey indicated that participants in nutrition education programs chose more nutritious foods, tried harder to conserve nutrients when cooking, and reported they both used and shared the information with others.

SEA-Extension and State Extension professionals are actively involved in nutrition programs for the aging. Results of a survey conducted in 1976 showed:

- . Personnel from 47 States (92 percent) cooperated with the State Agency on Aging via serving on State councils or advisory committees, assisting with in-service programs, and preparing materials.
- . Sixteen States had short-term projects funded by the State Agency on Aging in the field of nutrition. Additional funding has been made since 1976.

- . Extension personnel have trained workers for group feeding sites and have conducted programs at many sites and senior centers.
- . Special materials have been developed for use with the elderly.

In addition to cooperating with the State Agency on Aging, reports indicate cooperation with other agencies such as the Governor's committee on aging and colleges which sponsor college week or school days for senior citizens.

A report from Utah on a Senior Nutrition Aid Program involving over 4,000 elderly showed significant improvement in cholesterol levels, blood pressure, and glucose in urine as well as improvement in almost all dietary criteria. Diet data were based on food recalls, computer and biochemical diet evaluations at six month intervals. The program involved the use of eating sites, meal delivery, 4-H help in planting and tending gardens, and the development of community gardens.

DECREASED HEALTH RISK THROUGH IMPROVED FOOD HANDLING

Food handling practices are an integral part of most Extension programs including home food preservation, home food storage, and food preparation techniques. Teaching proper food handling practices is aimed at reducing the incidence of food-borne illness caused by microbiological contamination. Moreover, in order to meet the demand for information and assistance in developing food preservation skills, 'Master Cannors' and persons from other agencies and organizations are trained to teach others. Programs, resources, and research projects have focused on recommendations which result in a high quality, safe, preserved product. Individuals are taught to assess the economic practicability of home food preservation for their own households.

Several studies have shown Extension efforts made a difference in the use of pressure cookers for home preservation after Extension home economists provided both pressure cooking education and testing. Seven of 11 States providing followup data reported an average of 3,640 participants per State in such programs.

Since food preservation is reported on in the section about home economics programs, only studies relevant to food safety are considered here. A study in Washington indicated that more people used pressure canners and standard jars after contact with Extension than at the time of their initial contact. A similar study in Nebraska found that more persons reported using techniques taught in Extension workshops after lessons than before participation. A comparison of homemakers with different canning practices in Tennessee supported the conclusion that those using the safest techniques were those who participated the most in Extension home economics programs.

A Minnesota study of homemaker groups dealt with knowledge of principles of food safety to prevent food poisoning, as well as knowledge on preserving quality. Before-and-after-test results showed improvement in both areas

following leader training and group meetings. This knowledge was retained in followup tests one month later.

INCREASED COMPETENCE IN MAKING FOOD BUYING CHOICES

Extension food management programs include planning meals and shopping lists, selecting and buying food products, and using available food resources. Individuals learn about food habits affecting food costs, the importance of planning before shopping, comparative shopping skills, nutritional labeling information, and food waste adding to food costs.

Nutrition and economic goals of Extension home economics are both pursued in a variety of programs in financial management, home gardening, food preservation and consumer affairs. Many programs which contribute to improved nutrition through planning and management are summarized in the section on economics.

Studies not summarized in that section include two conducted in Arkansas on the impact on food buying in short courses and combinations of workshops and mass media programs. Sixty-five percent of those surveyed orally indicated learning cost cutters, and 40 percent said they had used such cost cutters. The workshop and mass media program involved 2,277 people and mail-back questionnaire data suggested practice change for 60 to 90 percent of those responding, depending on the specific practice assessed.

The over 60 years of work by Extension home economists in nutrition laid the foundation and provided the readymade network for the Expanded Food and Nutrition Program, a discussion of which follows.

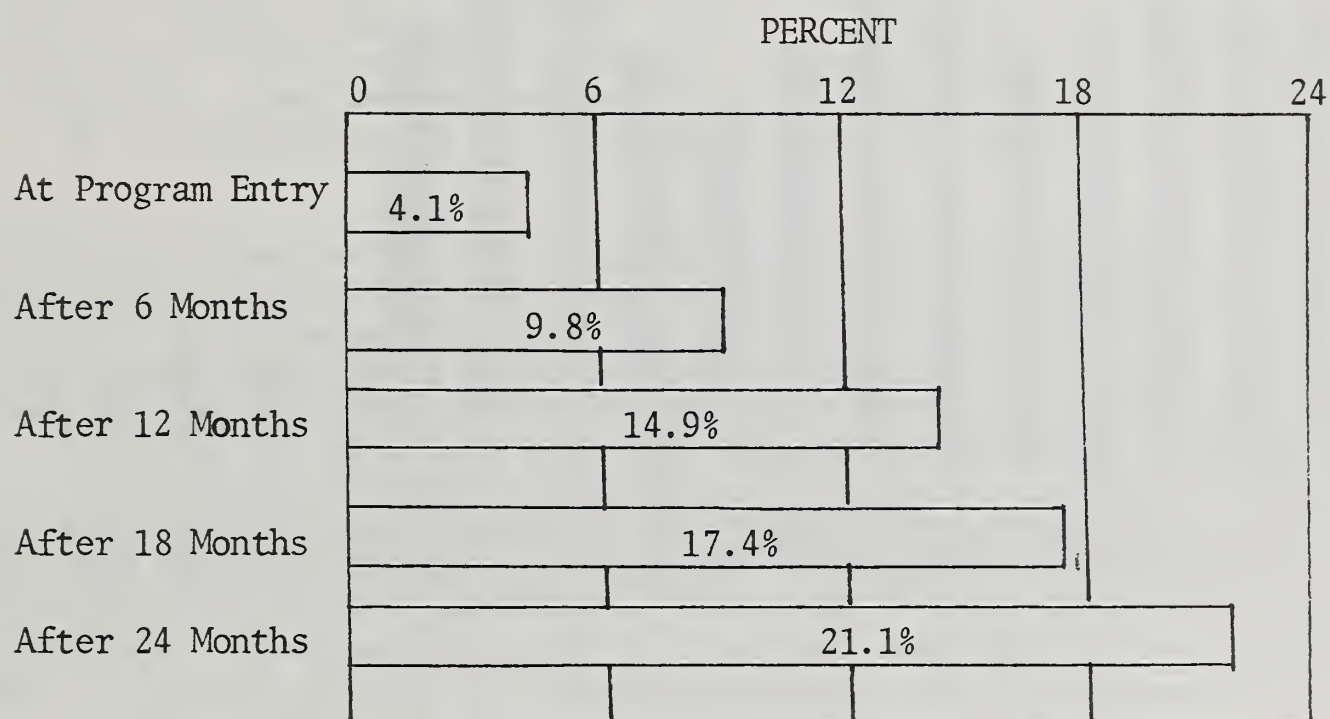
EXPANDED FOOD AND NUTRITION PROGRAM

EFNEP operates in about 1,270 sites in the 50 States and Puerto Rico, employing 5,215 paraprofessionals. According to SEA-Extension data from January 1969 through September 1978, a total of 1,649,450 homemakers representing over 6 million family members participated in the program. Seventy-three percent of the families have incomes under \$5,000 and 32 percent under \$3,000. Approximately 34 percent of the family's income is spent on food. As of March 1978, about 59 percent of program families lived in cities, and families of minority races represented 60 percent of the audience. Approximately 3.5 million youth have participated in youth EFNEP activities. Since fiscal year 1972, over 209,470 volunteers have assisted with program delivery.

A poll conducted by The Gallup Organization for this Federal evaluation revealed that about 1.5 percent of adults interviewed indicated participating in EFNEP at some time. When combined with 1978 census estimates, this figure suggests that about 2.3 million people in the current population have had some involvement with EFNEP either as clients, volunteers, or staff. Such an estimate is close to the cumulative totals for adults reported by SEA-Extension.

Figure 8.

Percentage of Program Family Homemakers Reporting Two or More Servings of Milk, Two or More Servings of Meat, Four or More Servings of Fruits and Vegetables, Four or More Servings of Breads and Cereals, After Various Periods of EFNEP Participation



SYNECTICS CORPORATION ANALYSIS

The Synectics Corporation conducted an analysis of the status of EFNEP through late 1977 and early 1978. The data reported based on food recall interviews assess the number of servings in four specific food groups: fruits and vegetables, breads and cereals, milk, and meat. For scoring purposes, an "adequate diet" consists of two or more servings each of milk and meat, four or more servings of vegetables and fruits, and four or more servings of breads and cereals. Figure 1 summarizes the proportion of program family homemakers meeting the criteria of an adequate diet at program entry and 6 month intervals in March 1978.

While about 4 percent of EFNEP participants had adequate diets at entry, 21 percent of those in the program for 24 months had adequate diets. Specific analysis of each of the four food groups shows the difference for servings of meat. Over 70 percent reported two or more servings at program entry as compared to 35 percent of those still participating after 24 months. The proportions reporting the proper number of servings of milk at entry level and after 24 months were 28 and 48 percent respectively. The difference for proper servings of bread and cereals was 41 as compared to 39 percent.

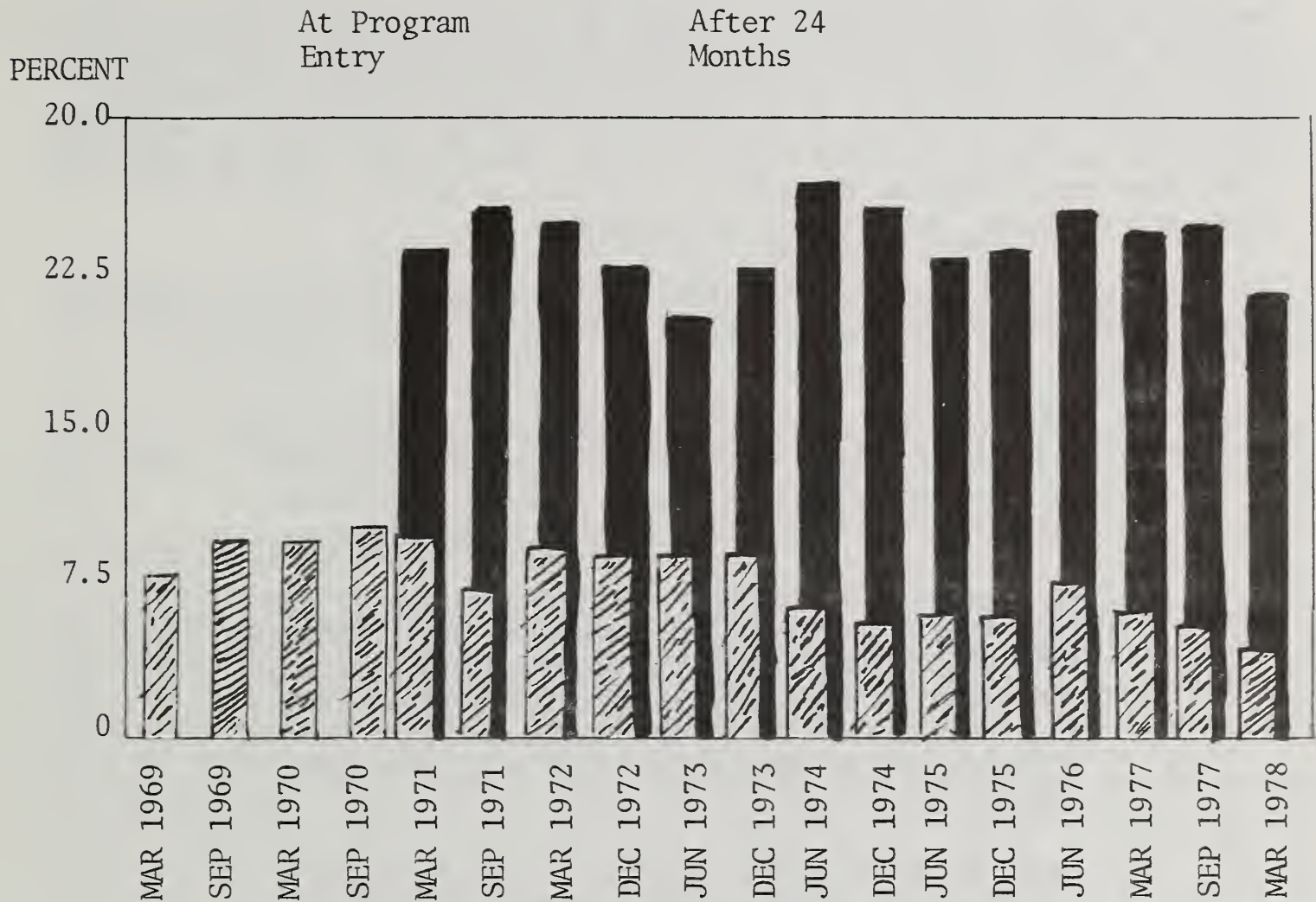
Because the diets of Americans in general, and low-income people in particular, have been noted to be particularly deficient in servings of fruits and vegetables, EFNEP has been especially concerned with emphasizing the importance of this food group. Compared to participants at program entry, the proportion of 24-month participants reporting the proper servings of fruits and vegetables, was nearly 2.5 times greater.

An historical analysis of the proportion with adequate servings in all food groups is summarized in figure 2. The program entry data suggest that EFNEP has been reaching homemakers who are in special need of nutrition education. The proportion with adequate diets at program entry was about 8 percent from 1969 through 1973, but has hovered around 4 or 5 percent in more recent years. While there is no consistent trend over time in the percentages reporting adequate diets after 24 months, the percentage difference as compared to participants at entry has actually been increased over the years. EFNEP has been reaching a clientele with less adequate diets to begin with than in previous years with no obvious decline in percentage with adequate servings in all food groups after 24 months of program participation.

In addition to changing patterns of food consumption, EFNEP has been concerned with helping families manage their resources in realizing nutritious diets. Families are informed of food assistance programs and are referred to those for which they may be eligible. During the history of EFNEP, there has been an increase in the proportion of program families receiving food assistance, especially through participation in the Food Stamp Program. In March 1978, nearly one-half of program families were in the Food Stamp Program as compared to less than 15 percent in the late 1960's. The increase appears specific to participation of eligible families in the Food Stamp Program since there is no consistent trend in the percentage of EFNEP families receiving general welfare assistance.

Figure 9.

Percentage of Program Homemakers With Adequate Servings
In All Food Groups At Program Entry (Food Recall #1)
And After 24 Months of Program Participation
(Food Recall #5)



A comparison of Food Stamp and non-Food Stamp families by the Synectics Corporation indicated that Food Stamp homemakers reported less adequate diets than non-Food Stamp homemakers at program entry, but that participants remaining at the 24-month interval had comparable scores. As was the case for EFNEP participants in general, the most sizeable differences occurred in the percentages reporting adequate servings of fruits and vegetables.

STATE AND LOCAL STUDIES

One of the most recent studies of EFNEP is an evaluation of long-term effects produced in Michigan. This study compared only those families which had three sets of food recall scores, and avoided the problem of comparing quite different groups of participants at different intervals. Moreover, the survey collected another round of food recall data, data on nutrition knowledge, food shopping practices, adoption of skills taught by nutrition aides, and a variety of spin-off consequences.

The conclusions of the Michigan study, which suggested that the aggregate results reported above are not merely a function of case mortality, are summarized:

- . The diets of low-income homemakers enrolled in the EFNEP program not only showed improvement during program enrollment, but also remained improved even over one year after program termination.
- . An overwhelming majority of homemakers perceived that they had made major changes in their families' food habits as a result of program participation. The most important things reported learned from the program were food preparation, nutrition, meal planning, price comparison, and sales awareness skills.
- . Those with the greatest need (as reflected in low initial food recall scores) showed the greatest improvement.
- . Nutrition knowledge was not directly related to dietary change, but it was related to high food shopping practice skills and greater adoption of recommended practices.
- . Factors related to adoption of improved food behavior and food shopping practices include increased income, education, and motivation and involvement in program decisions.

Another study in Minnesota reported similar results in a comparison of 100 EFNEP participants and 40 nonparticipants. EFNEP clients were found to think of food more in terms of nutritional value and to plan meals.

Furthermore, significant improvements in diet occurred for twice as many participants as nonparticipants.

In addition to the analysis by the Synectics Corporation, Kappa Systems, Inc., was commissioned to review and abstract the scientific literature on the effects of EFNEP. A large number of studies were deemed by reviewers to have stated conclusions or findings warranted by the data. Of 35 studies of EFNEP participants, two reported negative or partially negative findings. A study of 200 EFNEP families matched with 200 nonprogram families living in adjacent nonprogram areas in Missouri found that, while good buying skills and nutrition knowledge had improved, the diets of program families and nonprogram families were not significantly different. Another study in Louisiana concluded that EFNEP participants had significantly increased their knowledge of nutrition but that the mean quality of diets for the two groups was comparable.

In contrast, other studies in East Harlem, Delaware, Nebraska, Louisiana, Mississippi, Kentucky, North Carolina, New York, New Jersey, and elsewhere supported the general conclusion that EFNEP participants improved their diets over time and that, when control group data were available, the improvement appeared attributable to the program. Moreover, even the two studies reporting no diet differences showed significant differences in nutrition knowledge. Several spin-off consequences are suggested by these studies as well.

GARDENING AND FOOD PRESERVATION

The attempt to improve consumption of fruits and vegetables, coupled with EFNEP emphasis on developing skills in the management of resources related to food, has led to efforts to encourage home gardening and food preservation. Since data on these programs are not reported on a national scale, observations on impact must rely on State or local data; this obviously limits generalization. Since there are no nationwide data on the proportion of the general population with home gardens, it is extremely difficult to determine whether EFNEP efforts to encourage such gardens did in fact increase the proportion of people gardening. However, several State narratives suggested that efforts to encourage home gardening among EFNEP participants did increase the number of EFNEP families doing so. For example, Oklahoma reported in its 1978 narrative that in one county with such a program, there was a 16 percent increase in families planting gardens and a 53 percent increase in families preserving food. In Pennsylvania, 25 percent of EFNEP participants planted a garden for the first time. Another report from a 1977 narrative yielded a figure of 15 percent gardening for the first time. Whether the proportion of EFNEP families gardening for the first time is greater than it would have been without the program cannot be determined, given the lack of comparative data. Based on a limited number of reports, however, it appears that an increasing proportion of EFNEP families have been planting gardens.

A USDA survey in 1976 found that about 32 percent of American households canned fruits and vegetables in 1975. In rural areas, 53 percent of households had owned canners as compared to 20 percent of households in large metropolitan areas. The greatest proportion of households with canners was found in the West (40 percent) followed closely by the Northcentral (37 percent) and Southern States (35 percent), with no national figures on the proportion of EFNEP families that can or preserve fruits and vegetables. A Louisiana study of EFNEP families in one parish reported that 62 percent of Food Stamp EFNEP and 90 percent of non-Food Stamp EFNEP families raised vegetables for family consumption, which is certainly higher than would be anticipated for a rural area. However, without comparative data on non-EFNEP families in that area, there is no way of knowing whether such a proportion is high. A narrative report from Oklahoma indicated a 53 percent increase in EFNEP families preserving food.

OVERVIEW: ASSESSING SOCIAL AND ECONOMIC CONSEQUENCES OF EXTENSION HOME ECONOMICS AND NUTRITION PROGRAMS, INCLUDING EFNEP

A wide range of information was used to assess the impact of home economics and nutrition programs. The results, described in detail in the sections to follow, are highlighted in this overview:

HOME ECONOMICS PROGRAMS

- . Eleven percent of the adult American population indicated in a national survey that they had "participated in" and between one-third and one-half of these "received information" from Extension home economists.
- . Several sources of data show that between 80 and 90 percent of Americans receiving information from Extension home economists find the information "useful."
- . Nutrition and food preservation are the most commonly identified topics of home economics Extension education, followed by energy conservation.
- . Extension home economics is a major source of information on food preservation, with between 1 and 2 percent of the adult American population drawing on Extension for such information.
- . An assessment of the economic value of home food preservation and home gardening indicates that the savings exceed the costs for programs that encourage gardening and preservation.

- . The average participant in Extension home economics clothing and textile programs saves \$50 annually by making clothes.
- . Assessment of Extension home economics programs that emphasize energy conservation audits indicate participant savings ranging between \$57 and \$150 annually.
- . About two-thirds of participants in Extension home economics programs on marriage enrichment believed that such programs led to a better understanding of marriage relationships.
- . Programs to improve parent-child relationships are viewed as beneficial by the majority of participants.
- . Home economics Extension staff are directly involved in the establishment of community programs in child care and the enhancement of health and independence for elderly.
- . EFNEP efforts to encourage home gardening increase the proportion of program participants who grow gardens.
- . Participants in home economics nutrition education programs chose more nutritious foods after participation compared to their before participation choices.
- . Knowledge and use of safe food preservation techniques increased following participation in Extension home economics programs.
- . While few nutrition education programs have been evaluated, those that have, show enhancement of nutrition knowledge.
- . The average weight loss in Extension home economics weight control programs was 11 pounds per participant.
- . The Expanded Food and Nutrition Education program shows strong evidence of improved nutrition for participating families.
- . Improvement in diets of low-income homemakers enrolled in EFNEP is maintained even after one year following termination from the program.

V.

PROPOSED FRAMEWORK FOR NATIONAL EVALUATION OF EXTENSION HOME ECONOMICS PROGRAMS

This paper proposed a general strategy for national evaluation of social and economic consequences of Extension home economics programs. We have developed this framework to stimulate discussion toward long-range planning of future evaluation Extensionwide as well as the immediate collection of national data concerning the consequences of Extension home economics programs. These overriding questions provided direction for the strategy developed in this paper:

1. How to secure high quality consequence data given the limitations of studying volunteer program participants,
2. How to collect necessary and sufficient consequence data with cost, Extension personnel time, and participant time held to a minimum, and
3. How to ensure that consequence data can be generalized to what's happening, or not happening, across the U.S.

NATIONAL EVALUATION OVERSIGHT TEAM

It is proposed that a National Evaluation Oversight Team be created by the Federal Evaluation Project Policy Group. This team will be comprised of representatives from the Extension Committee on Organization and Policy, Science and Education Administration, and other representatives (see figure 11). There are alternative ways and means of staffing the National Evaluation's Oversight Team as indicated in the proposed team for home economics Extension (see figure 11). In this case, the Evaluation Team includes both people involved in home economics Extension, including program staff and clientele, and those outside the program, including evaluation and potential clientele.

The National Evaluation Oversight Team will be charged with telling policymakers the results of consequence data studies that represent the nation as a whole. The National Evaluation Oversight Team will perform a triple function:

1. Implement national studies of the social and economic consequences of Extension home economics programs,
2. Give theoretical direction to, then receive and synthesize findings from State and county evaluation efforts, and

3. Seek to systematically strengthen and make use of current Experiment Station and other university organizations to carry out Extension home economics impact evaluations.

NATIONAL STUDIES

We have taken into account the following design concerns in developing the national studies:

1. Data should represent Extension throughout the United States or be capable of doing so over a reasonable time span. Data, for example, might be collected from a representative sample of States over a 5 to 10 year period, thus permitting trend analysis.
2. Data are needed on client perceptions and self-reported behavior change relative to pre-established social and economic consequence indicators. However, each year (or alternate year) some investment might be made in supplemental studies which use verified results of learning and practice change.
3. Data should reflect, within reasonable expectations, the amount of contribution Extension has made in the adoption of a new practice or a change of attitude.
4. Data collection should not excessively interfere with delivery of services on a local level nor should it be an excessive financial burden to the county or State. It would be wasteful to require consequence data from all 3,200 plus counties. A scientific representatives sample is one alternative.
5. Specific funds should be set aside on a competitive basis for various evaluation followup studies that will naturally flow from the collection of consequence data.
6. The collection of data will have little value unless the county, State, and Federal partners set aside time and resources to talk about, discuss, and use the results of any national data collection effort.

7. Data need to be acceptable as scientifically valid at all levels in the government and by Extension personnel and clientele. Extension home economics personnel should be involved in deciding what questions will be asked and in interpreting findings, but should not be involved in collecting data for national studies.

National study data collection should be contracted out for the following reasons:

- a. Data collection and analysis should not interfere with program delivery.
- b. To meet outside concerns that data collection will be more objective if collected by a group not involved in program delivery.
- c. Data gathering expertise of a high level should be utilized which may be difficult to locate in the Extension system.
- d. To provide expertise concerning design (e.g. OMB instrument clearance and statistical analysis) which may not be available in the Extension system.

PROPOSED DESIGN

To meet the design concerns just discussed, proposed is a series of three national studies to evaluate Extension home economics consequences from the accountability perspective of the Federal partner. The three national studies proposed are:

1. A General Population Study,
2. An Extension Participation Study, and
3. A Program Area Study.

These studies will supplement both the ongoing program evaluation efforts of the State specialists and county home economists as well as Extension evaluation efforts by Experiment Station and other university research groups.

1. A General Population Study will gather consequence data from a representative sample of the general public. The purpose of this study will be to determine how far into the population the Extension home economics information is penetrating, e.g.

what percent of all households recall receiving some information from home economics Extension during a period of time; the extent it is penetrating various segments of the population - men, urban, ethnic groups, age groups, etc.; who is getting information from Extension media and the impact of that information; and what proportion of the general population contacted Extension participants through one or more meetings. We propose that this data be collected in some combination of the following:

- a. Use Gallup or Roper type polling organizations,
 - b. "Piggy back" onto other national survey efforts carried out frequently by NORC (National Opinion Research Center) or SRC (Survey Research Center),
 - c. Through an inter-agency agreement, have the Census Bureau collect the data in its routine national surveys. This type of data might be collected every other year or, if needed, simultaneously by several sources and used as a pool of baseline data.
2. An Extension Participant Study will gather consequence data from those who have attended Extension meetings. The purpose will be to find out what people felt they learned from the meeting(s) they attended, how they used the information, and the results or benefits, if any, there were from the use. Questions will be developed from previously conceived clusters of social and economic consequences. Extension participants will be divided into groups reflecting high contact (seven hours with specified educational objectives) and low contact (attendance at any Extension meeting). We suggest using telephone surveys to hold down overall cost and still maintain a high response rate.
 3. A Program Area Study will gather consequence data from a sample of Extension participants identified as attending specific educational program areas, e.g., nutrition education, nutrition for the elderly, child development, consumer education,

food additives, and so on. The purpose will be to assess the consequences of specific Extension programs by looking at program objectives and cost-effectiveness and efficiency data. This study may be accomplished using a variety of methods such as participant observation, secondary analysis of existing records (unobstructive methods in general), in order to collect qualitative as well as quantitative data. Cost-related input data will be gathered in the program area study in assigned groups of States. For such a cost inventory, each State's county Extension home economists and State staff would keep detailed time and cost records which correspond to the type of survey being done. For example, in States involved, the agents and specialists involved in programming for the particular emphases would keep detailed records on time spent in planning, preparing and following up on activities as well as actual teaching time through meetings, radio, etc.

Compared to the scarcity of national consequence data available up to this point in time, acting upon all three of these studies each year may provide more data than the system (USDA, OMB, and Extension personnel) can use and absorb. A method to rotate the studies could be selected.

CONSEQUENCE INDICATORS

A set of social and economic consequences has been developed by a team of home economists and will be comprehensively reviewed throughout the Extension network. The set of consequences may be adjusted slightly in ensuing years, but major changes may be detrimental to the aim of establishing trends.

COORDINATION OF THE NATIONAL EVALUATION PROGRAM

Administration of the proposed national evaluation program is vital to its effectiveness. To insure coordination between States, consistency in data collection, and use of evaluation results, the formation of a National Oversight Team is suggested. The purpose of the National Team would be to implement the series national studies and interact with other research groups nationwide in order to strengthen the use of existing land-grant university research and evaluation resources in meeting the need for Extension home economics consequence data.

It is important that the Federal partner involve State and county staff as well as clients in the total design as well as interpretation of results for these evaluation studies. Figure 11 shows a model for suggested Evaluation Oversight Team representation. The critical elements include: (a) a concern for external and internal input, (b) involvement of evaluators, program representatives, and clients, and (c) representation from all levels within USDA crucial to the use of Evaluation results.

The Team (see figure 11) would be made up of representatives from inside and outside of the Extension network, and would consist of individuals with three types of expertise:

1. Evaluation expertise,
2. Program expertise, and
3. Client expertise.

The responsibilities of the oversight team would include:

1. Reviewing and/or finalizing consequences and indicators,
2. Participating in the review of potential contractors to collect and analyze data,
3. Drafting instrument(s),
4. Finalizing data collection procedures with contractor,
5. Reviewing and interpreting findings, and
6. Setting expected standards of performance to compare with consequence data.

The Oversight Team as proposed, may be too large, so subcommittees, perhaps based on regional team membership, could be formed to perform the necessary functions. Reviewing and/or finalizing consequences may be a fairly large job in only the first year if a well-developed set of consequences and indicators with which the team can work is anticipated. A subcommittee could more easily review bids from contractors for data collection and analysis. A subcommittee could also finalize procedures important to the implementation of the specific study.

Full committee input is most important at three stages of the process:

(1) drafting instruments, (2) setting standards of expected performance, and (3) reviewing and interpreting findings. When actual instruments are drafted and pre-tested by the contractors, full committee input with evaluator, program, and clientele expertise is essential. Also their expertise is necessary when setting performance expectations. This will include, but not

be limited to, the gathering and analysis of comparable information from other sources, setting standards of expected practice change given varying degrees of exposure to Extension education, and developing an outline for discussion of results and findings. The full committee would also necessarily be involved in communicating the findings and recommendations to interested audiences in USDA, OMB, Congressional Committees, and elsewhere. This Oversight Team must be provided with the staff and financial resources to carry out its mission.

Figure 10.

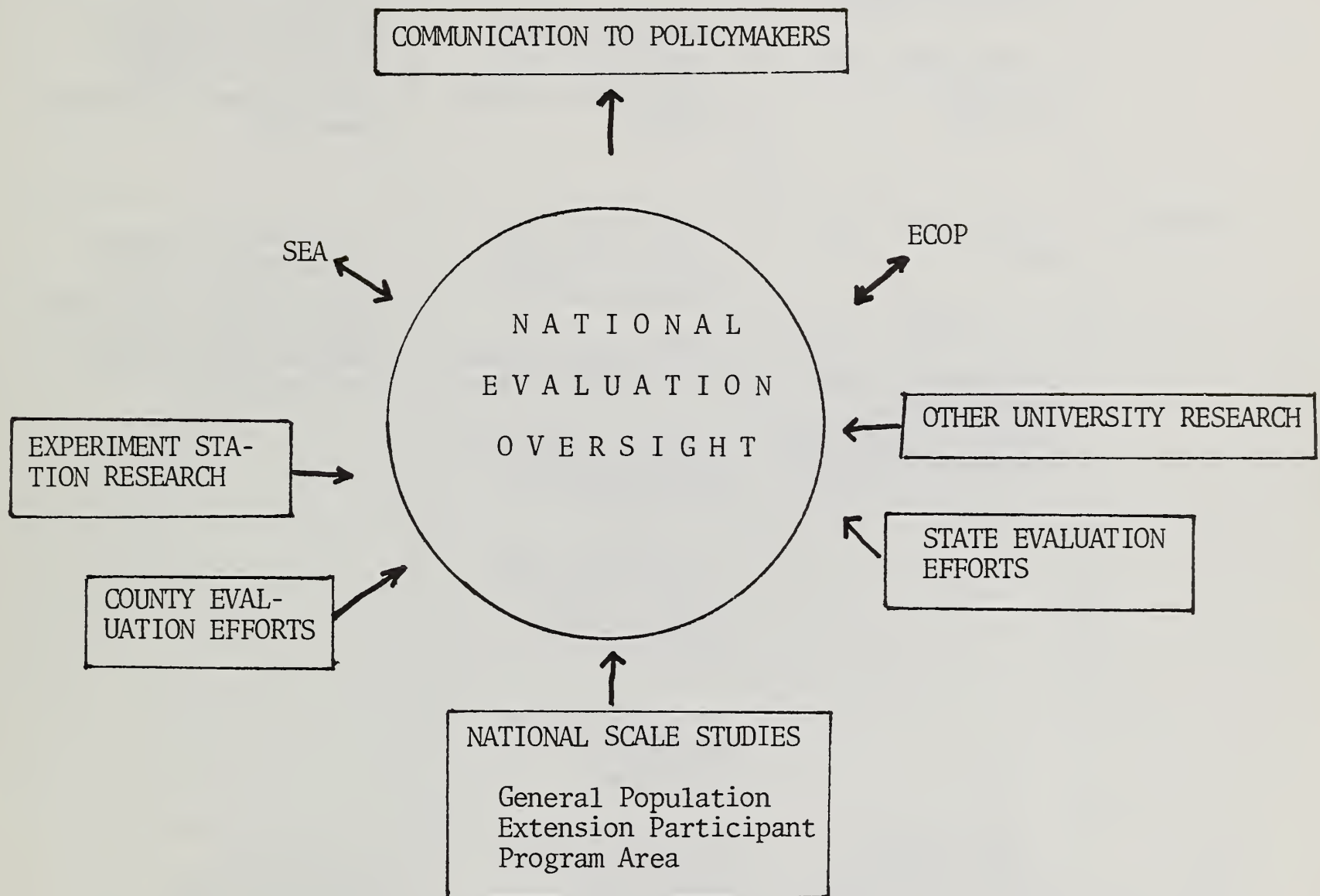
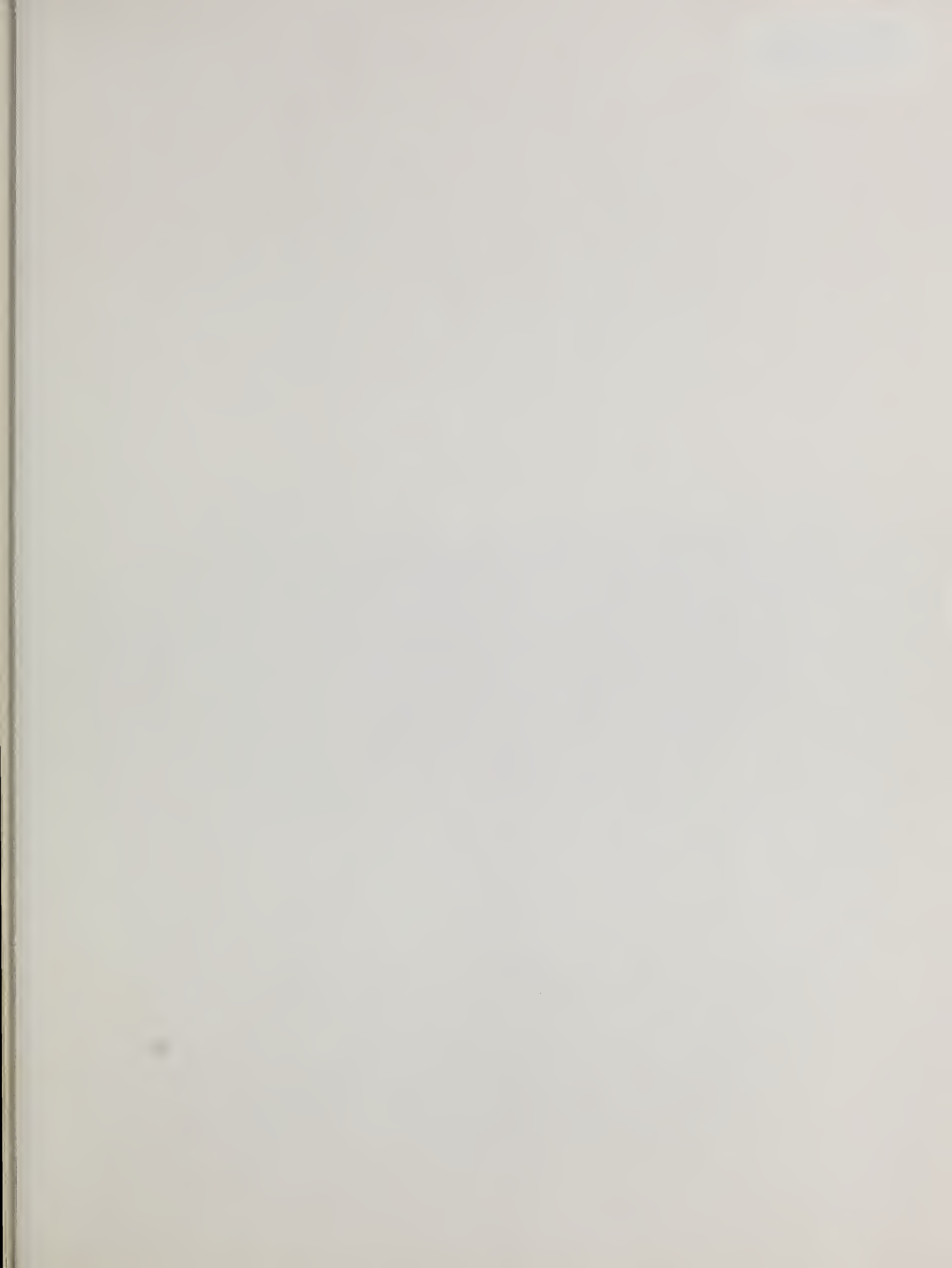


Figure 11. National Evaluation Oversight Team

	Evaluation Representation	Program Representation	Clientele Representation*
External	1 USDA evaluator 1 evaluator from OMB or other government agency 1 evaluator from academic or private	1 dean of school of home economics or 1 administrator from other home economics related agency	2 volunteer leaders who work closely with Extension program development (example: officer of a State Extension Homemaker Council) or County Home Economics Advisory Committee
Internal	1 evaluator from SEA and 1 Extension evaluator from a State (or two from different States)	1 ECOP home economics subcommittee representative 1 SEA home economics representative 1 State leader of home economics Extension 1 Extension specialist or 1 district/area director 1 county Extension home economist	3 representatives or participants and/or organizations concerned with the well-being of families not involved with Extension
Total	5 individuals with evaluation	6 program representatives	5 clientele representatives

* This group is a taxpayer-clientele group. Its purpose is to add a counterbalance to the professionals in the group and keep local people represented in this type of evaluation as well as they have been traditionally involved as partners in other phases of Extension program development.



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